Access DB# 124703

SEARCH REQUEST FORM

Scientific and Technical Information Center

Art Unit: 1659 Phone No. Mail Box and Bldg Room Location: REM 3011 (mailbox), 3014 If more than one search is submit	inlher 34 571-212-0969 Result (office) tted, please prioritize	*******	
Include the elected species or structures, ke	ywords, synonyms, acrony bat may have a special mea	s specifically as possible the subject matter to be seasched ans, and registry numbers, and combine with the concept or ining. Give examples or relevant citations, authors, etc., if abstract.	
Title of Invention: \(\left\) e (\(\alpha \cord \) Inventors (please provide full names): \(\left\)		e Constructs Combinatorial Libraries Ad Application Shi Y. Wel, H. Coi	الرية
Earliest Priority Filing Date: $\frac{2}{2}$	3-2002		
	· ·	arent, child, divisional, or issued patent numbers) along with the	
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L6
           1001 E3-87
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L7
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                E CAI HUI/AU
L8
             91 E3,E16
                 E BLOOD C/AU
             13 E3,E9-10
L9
                E SHADIACK A/AU
             21 E3-7
L10
            138 PALATIN?/CS,PA
L11
             17 L1-11 AND MELANOCORTIN/TI
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L13
              3 L12 AND METALLOPEPTID?
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               2 E1-4 AND L13
L14
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FILE 'HCAPLUS' ENTERED AT 08:56:48 ON 21 JUN 2004
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FILE COVERS 1907 - 21 Jun 2004 VOL 140 ISS 26 FILE LAST UPDATED: 20 Jun 2004 (20040620/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

'OBI' IS DEFAULT SEARCH FIELD FOR 'HCAPLUS' FILE

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ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2004 ACS on STN
L14
     2002:637480 HCAPLUS
AN
DN
     137:190724
     Entered STN: 23 Aug 2002
ED
    Melanocortin metallopeptides for treatment of sexual
TI
     dysfunction
     Sharma, Shubh D.; Shi, Yi-qun; Yang, Wei;
IN
     Cai, Hui-zhi; Shadiack, Annette
     Palatin Technologies, Inc., USA
PA
SO
     PCT Int. Appl., 58 pp.
     CODEN: PIXXD2
DT
     Patent
     English
LΑ
IC
     ICM A61K
     63-6 (Pharmaceuticals)
CC
     Section cross-reference(s): 2
FAN.CNT 1
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                     KIND DATE
                                          APPLICATION NO. DATE
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                                                            20020213
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                            20020822
PΤ
     WO 2002064091
                      A3
                          20030313
     WO 2002064091
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             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,
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                            20040226
                                          US 2003-640755
                                                            20030813
     US 2004038897
                      Α1
                            20010213
PRAI US 2001-268591P
                       Ρ
                            20020213
     WO 2002-US4431
                       Α
OS
     MARPAT 137:190724
     Metallopeptides are provided for use in treatment of sexual dysfunction in
AΒ
     mammals. The metallopeptides are agonists for at least one of
     melanocortin-3 or melanocortin-4 receptors. The metallopeptides are
     conformationally fixed on complexation of a metal ion-binding portion
     thereof with a metal ion. Also provided are metallopeptides that are
     antagonists for at least one of melanocortin-3 or melanocortin-4
     receptors.
     sexual dysfunction melanocortin metallopeptide agonist
ST
     Drug delivery systems
IT
        (buccal; melanocortin metallopeptides for treatment of sexual
        dysfunction)
     Drug delivery systems
ΙT
        (dermal; melanocortin metallopeptides for treatment of sexual
        dysfunction)
     Sexual behavior
TT
        (impotence; melanocortin metallopeptides for treatment of
        sexual dysfunction)
     Drug delivery systems
TT
        (inhalants; melanocortin metallopeptides for treatment of
        sexual dysfunction)
IT
     Drug delivery systems
        (injections, i.m.; melanocortin metallopeptides for treatment
        of sexual dysfunction)
     Drug delivery systems
IT
        (injections, i.v.; melanocortin metallopeptides for treatment
        of sexual dysfunction)
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IT
     Drug delivery systems
        (injections, s.c.; melanocortin metallopeptides for treatment
       of sexual dysfunction)
IT
     Mammalia
     Sexual behavior
        (melanocortin metallopeptides for treatment of sexual
       dysfunction)
IT
     Pituitary hormone receptors
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (melanocortin receptor, MC3, modulators; melanocortin
       metallopeptides for treatment of sexual dysfunction)
     Pituitary hormone receptors
IT
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (melanocortin receptor, MC4, modulators; melanocortin
       metallopeptides for treatment of sexual dysfunction)
IT
     Protein motifs
        (metal ion-binding; melanocortin metallopeptides for
        treatment of sexual dysfunction)
     Peptides, biological studies
TT
     RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic
     use); BIOL (Biological study); USES (Uses)
        (metallo-; melanocortin metallopeptides for treatment of
        sexual dysfunction)
TT
     Drug delivery systems
        (nasal; melanocortin metallopeptides for treatment of sexual
       dysfunction)
IT
     Drug delivery systems
        (ophthalmic; melanocortin metallopeptides for treatment of
        sexual dysfunction)
IT
     Drug delivery systems
        (parenterals; melanocortin metallopeptides for treatment of
        sexual dysfunction)
IT
     Conformation
        (protein; melanocortin metallopeptides for treatment of
        sexual dysfunction)
TT
     Drug delivery systems
        (pulmonary; melanocortin metallopeptides for treatment of
        sexual dysfunction)
IT
     Drug delivery systems
        (sublingual; melanocortin metallopeptides for treatment of
        sexual dysfunction)
IT
     Drug delivery systems
        (vaginal; melanocortin metallopeptides for treatment of
        sexual dysfunction)
IT
     448902-16-7
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                                                       448902-17-8
     448902-17-8D, metal ion complexes 448902-18-9
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     RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic
     use); BIOL (Biological study); USES (Uses)
        (melanocortin metallopeptides for treatment of sexual
        dysfunction)
     7440-15-5D, Rhenium, peptide complexes
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (melanocortin metallopeptides for treatment of sexual
        dysfunction)
     ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2004 ACS on STN
     2001:137478 HCAPLUS
     134:188233
     Entered STN: 25 Feb 2001
     Melanocortin metallopeptide constructs, combinatorial
     libraries, and applications
     Sharma, Shubh D.; Shi, Yi-Qun; Yang, Wei;
     Cai, Hui-Zhi
     Palatin Technologies, Inc., USA
     PCT Int. Appl., 80 pp.
     CODEN: PIXXD2
     Patent
     English
     ICM G01N033-53
     ICS C07K005-12
     1-12 (Pharmacology)
     Section cross-reference(s): 2, 34, 78
FAN.CNT 1
     PATENT NO.
                      KIND DATE
                                            APPLICATION NO.
                                                             DATE
     ______
                            -----
                                            ______
                                                             _____
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     WO 2001013112
                          20010222
                                           WO 2000-US16396 20000615
                     A1
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR,
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             LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD,
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             ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
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             IE, SI, LT, LV, FI, RO, MK, CY, AL
PRAI US 1999-148994P
                            19990812
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     WO 2000-US16396
                            20000615
                       W
     MARPAT 134:188233
OS
     Metallopeptides and metallopeptide combinatorial libraries specific for
AΒ
     melanocortin receptors are provided, for use in biol., pharmaceutical and
     related applications. The metallopeptides and combinatorial libraries are
     made of peptides, peptidomimetics and peptide-like constructs, in which
     the peptide, peptidomimetic or construct is conformationally fixed on
     complexation of a metal ion-binding portion thereof with a metal ion.
ST
     melanocortin metallopeptide combinatorial library; receptor
     melanocortin metallopeptide combinatorial library
     Amino acids, biological studies
IT
     RL: BOC (Biological occurrence); BSU (Biological study, unclassified);
     BIOL (Biological study); OCCU (Occurrence)
        (3-mercapto; melanocortin metallopeptide constructs,
        combinatorial libraries, and applications)
IT
     Melanoma
        (B16 cells; melanocortin metallopeptide constructs,
        combinatorial libraries, and applications)
IT
     Peptides, biological studies
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
     (Uses)
        (complexes, with metals; melanocortin metallopeptide
        constructs, combinatorial libraries, and applications)
IT
     Pituitary hormone receptors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (melanocortin 1; melanocortin metallopeptide constructs,
        combinatorial libraries, and applications)
IT
     Pituitary hormone receptors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (melanocortin 4; melanocortin metallopeptide constructs,
        combinatorial libraries, and applications)
IT
     Peptide library
     Protective groups
        (melanocortin metallopeptide constructs, combinatorial
        libraries, and applications)
IT
     Pituitary hormone receptors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (melanocortin; melanocortin metallopeptide constructs,
        combinatorial libraries, and applications)
IT
     Peptidomimetics
        (metal complexes; melanocortin metallopeptide constructs,
        combinatorial libraries, and applications)
TT
     Coordination compounds
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
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              THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT 5
(1) Ghadiri; US 5200504 A 1993 HCAPLUS
(2) Rhodes; US 5277893 A 1994 HCAPLUS
(3) Sharma; US 5891418 A 1999 HCAPLUS
(4) Sharma; US 6027711 A 2000 HCAPLUS
(5) Zamora; US 5690905 A 1997 HCAPLUS
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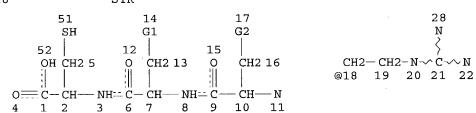
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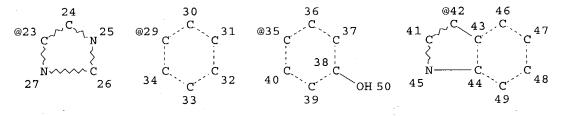
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Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

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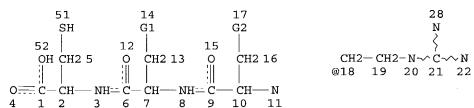
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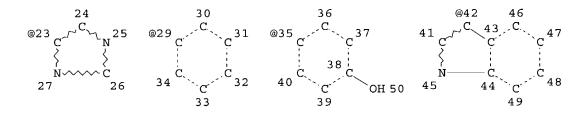
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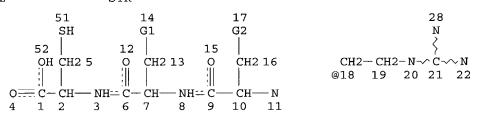


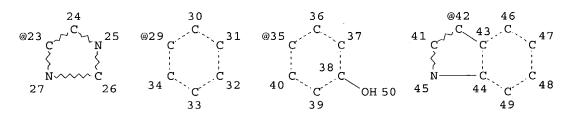
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OTHER NAMES:

CN 281: PN: US6723700 SEQID: 281 unclaimed sequence

FS PROTEIN SEQUENCE; STEREOSEARCH

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RELATED SEQUENCES AVAILABLE WITH SEQLINK

MF C38 H61 N9 O11 S2

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

DT.CA CAplus document type: Patent

RL.P Roles from patents: PRP (Properties)

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:350620

L21 ANSWER 2 OF 30 REGISTRY COPYRIGHT 2004 ACS on STN

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SR CA

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DT.CA CAplus document type: Patent

RL.P Roles from patents: PRP (Properties)

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LC STN Files: CA, CAPLUS

DT.CA CAplus document type: Patent

RLD.P Roles for non-specific derivatives from patents: BIOL (Biological study); PRP (Properties); USES (Uses)

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- 1 REFERENCES IN FILE CA (1907 TO DATE)
- 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
- 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 139:322283

L21 ANSWER 4 OF 30 REGISTRY COPYRIGHT 2004 ACS on STN

RN 593277-89-5 REGISTRY

CN L-Cysteine, L-cysteinyl-L-arginyl-L-arginylglycyl-L- α -aspartyl-L-tryptophyl-L-leucyl- (9CI) (CA INDEX NAME) OTHER NAMES:

CN 90: PN: WO03072542 SEQID: 95 claimed sequence FS PROTEIN SEQUENCE; STEREOSEARCH SOL 8

PATENT ANNOTATIONS (PNTE):

SEQ 1 CRRGDWLC MF C41 H65 N15 O11 S2

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

DT.CA CAplus document type: Patent

Absolute stereochemistry.

HN S
$$CO_2H$$
 O CO_2H O

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 139:235485

L21 ANSWER 5 OF 30 REGISTRY COPYRIGHT 2004 ACS on STN

RN 577704-67-7 REGISTRY

CN L-Cysteine, L- α -glutamyl-L- α -aspartyl-L-alanyl-L-serylglycyl-L-tyrosyl-L-leucyl- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 33: PN: US20030148449 SEQID: 32 unclaimed sequence

FS PROTEIN SEQUENCE; STEREOSEARCH

SOL 8

PATENT ANNOTATIONS (PNTE):

Sequence | Patent | Source | Reference | R

SEQ 1 EDASGYLC

MF C35 H52 N8 O15 S

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

DT.CA CAplus document type: Patent

RL.P Roles from patents: PRP (Properties)

Absolute stereochemistry.

HO
$$\begin{array}{c} & & & & \\ & & \\ & & & \\ & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & &$$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 139:175550

L21 ANSWER 6 OF 30 REGISTRY COPYRIGHT 2004 ACS on STN

RN 463968-18-5 REGISTRY

CN L-Cysteine, L-cysteinyl-L-threonyl-L-isoleucyl-L-phenylalanyl-L-leucyl-(9CI) (CA INDEX NAME)

OTHER NAMES:

CN 1: PN: WO02076489 SEQID: 7 claimed protein

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 6

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PATENT ANNOTATIONS (PNTE):
```

Sequence | Patent | Source | Reference | R

SEQ 1 CTIFLC MF C31 H50 N6 O8 S2

SR CA

LC STN Files: CA, CAPLUS, USPATFULL DT.CA CAplus document type: Patent

RL.P Roles from patents: BIOL (Biological study); PRP (Properties); USES (Uses)

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 137:299886

L21 ANSWER 7 OF 30 REGISTRY COPYRIGHT 2004 ACS on STN

RN 404368-38-3 REGISTRY

CN L-Cysteine, L-cysteinyl-L-seryl-L-arginyl-L-seryl-L-seryl-L-phenylalanyl-L-leucyl- (9CI) (CA INDEX NAME)

OTHER NAMES:

N 108: PN: WO0220722 SEQID: 108 claimed sequence

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 8

PATENT ANNOTATIONS (PNTE):

SEQ 1 CSRSSFLC MF C36 H59 N11 O12 S2

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER DT.CA CAplus document type: Patent

RL.P Roles from patents: BIOL (Biological study); PRP (Properties); USES (Uses)

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 136:242898

L21 ANSWER 8 OF 30 REGISTRY COPYRIGHT 2004 ACS on STN

RN 403983-92-6 REGISTRY

CN L-Cysteine, L- α -aspartyl-L-leucyl-L- α -glutamyl-L-seryl-L-

phenylalanyl-L-leucyl- (9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 7

SEQ 1 DLESFLC MF C36 H55 N7 O13 S

SR CA

LC STN Files: CA, CAPLUS

DT.CA CAplus document type: Journal

RL.NP Roles from non-patents: PRP (Properties)

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 136:247853

L21 ANSWER 9 OF 30 REGISTRY COPYRIGHT 2004 ACS on STN

RN 402752-77-6 REGISTRY

CN L-Cysteine, L-cysteinylglycyl-L-seryl-L- α -aspartyl-L-arginyl-L-tryptophyl-L-leucyl- (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 8

SEQ 1 CGSDRWLC

MF C38 H58 N12 O12 S2

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

DT.CA CAplus document type: Patent

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 136:227913

L21 ANSWER 10 OF 30 REGISTRY COPYRIGHT 2004 ACS on STN

RN 393865-43-5 REGISTRY

CN L-Cysteine, L- α -glutamyl-L-arginyl-L-leucyl-L-phenylalanyl-L-leucyl-

(9CI) (CA INDEX NAME)

OTHER NAMES:

CN 80: PN: WO0207676 SEQID: 129 claimed sequence

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 6

PATENT ANNOTATIONS (PNTE):

SEQ 1 ERLFLC MF C35 H57 N9 O9 S

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

DT.CA CAplus document type: Patent

RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 136:151438

L21 ANSWER 11 OF 30 REGISTRY COPYRIGHT 2004 ACS on STN

RN 385824-07-7 REGISTRY

CN L-Cysteine, L-valyl-L-histidyl-L-histidyl-L- α -aspartyl-L-phenylalanyl-L-tyrosyl-L-arginyl- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 1322: PN: WO0131019 PAGE: 492 claimed protein

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 8

PATENT ANNOTATIONS (PNTE):

492

SEQ 1 VHHDFYRC MF C48 H65 N15 O12 S

SR CA

LC STN Files: CA, CAPLUS

DT.CA CAplus document type: Patent

RL.P Roles from patents: BIOL (Biological study); PRP (Properties); USES (Uses)

PAGE 1-A

PAGE 1-B

__NH2

SH

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 136:84685

L21 ANSWER 12 OF 30 REGISTRY COPYRIGHT 2004 ACS on STN

RN 383413-54-5 REGISTRY

CN L-Cysteine, L-tryptophyl-L-arginyl-L-tyrosyl-L-arginyl- (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 5

SEQ 1 WRYRC

MF C35 H50 N12 O7 S

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

DT.CA CAplus document type: Patent

RL.P Roles from patents: BIOL (Biological study); PRP (Properties); USES (Uses)

Absolute stereochemistry.

PAGE 1-B

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PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 136:64158

L21 ANSWER 13 OF 30 REGISTRY COPYRIGHT 2004 ACS on STN

RN 376597-97-6 REGISTRY

CN 1: PN: US6322780 SEQID: 17 unclaimed sequence (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 5

PATENT ANNOTATIONS (PNTE):

Sequence | Patent

Source | Reference

==============

Not Given | US6322780

unclaimed SEQID 17

SEQ 1 YAFLC

MFC30 H41 N5 O7 S

SR CA

LCSTN Files: CA, CAPLUS, USPATFULL DT.CA CAplus document type: Patent

Roles from patents: PRP (Properties)

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

1: 136:4708 REFERENCE

L21 ANSWER 14 OF 30 REGISTRY COPYRIGHT 2004 ACS on STN

RN363173-99-3 REGISTRY

L-Cysteine, L-phenylalanyl-L-prolyl-L-histidyl-L-prolylglycyl-L-tyrosyl-L-CNleucyl- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN18: PN: W00170766 SEQID: 112 claimed sequence

Antigen pp65 [495-phenylalanine, 497-proline, 498-histidine, 499-proline, CN500-glycine, 501-tryptophan, 502-leucine] (Cytomegalovirus)

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 8

PATENT ANNOTATIONS (PNTE):

Sequence | Patent Reference Source

Not Given | WO2001070766

claimed

SEQID 112

SEQ 1 FPHPGYLC

MF C45 H60 N10 O10 S

SR

CA, CAPLUS, TOXCENTER, USPAT7, USPATFULL LCSTN Files:

DT.CA CAplus document type: Patent

Roles from patents: BIOL (Biological study); PREP (Preparation); PRP

(Properties); USES (Uses)

Absolute stereochemistry.

PAGE 1-B

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PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 135:267216

L21 ANSWER 15 OF 30 REGISTRY COPYRIGHT 2004 ACS on STN

RN 336833-83-1 REGISTRY

CN L-Cysteine, glycyl-L-methionyl-L- α -aspartyl-L-lysyl-L-tyrosyl-L-arginyl- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 43: PN: WO0131019 PAGE: 403 claimed protein

CN 4482: PN: W00131019 PAGE: 699 claimed protein

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 7

PATENT ANNOTATIONS (PNTE):

|W02001031019 |claimed PAGE |699

SEQ 1 GMDKYRC

MF C35 H57 N11 O11 S2

SR CA

LC STN Files: CA, CAPLUS

DT.CA CAplus document type: Patent

RL.P Roles from patents: BIOL (Biological study); PRP (Properties); USES (Uses)

Absolute stereochemistry.

PAGE 1-A

$$HO_2C$$
 R SH O NH S $(CH_2)_3$ H NH_2 HO

PAGE 2-A

3 REFERENCES IN FILE CA (1907 TO DATE)

3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 136:117375

REFERENCE 2: 136:4714

REFERENCE 3: 134:339530

L21 ANSWER 16 OF 30 REGISTRY COPYRIGHT 2004 ACS on STN

RN 300346-05-8 REGISTRY

CN L-Cysteine, L-methionylglycyl-L-leucyl-L-tryptophyl-L-tryptophyl-L-arginyl- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 74: PN: W00061620 SEQID: 74 claimed sequence

CN 786: PN: WO02077186 SEQID: 786 claimed

CN Immune system-associated secretory peptide (human clone HTEEF26)

CN Secretory peptide (human clone HTEEF26)

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 7

PATENT ANNOTATIONS (PNTE):

claimed SEQID 74

SEQ 1 MGLWWRC

MF C44 H62 N12 O8 S2

SR CA

LC STN Files: CA, CAPLUS

DT.CA CAplus document type: Patent

RL.P Roles from patents: BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); PRP (Properties); USES (Uses)

Absolute stereochemistry.

2 REFERENCES IN FILE CA (1907 TO DATE)

2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 137:274139

REFERENCE 2: 133:291989

L21 ANSWER 17 OF 30 REGISTRY COPYRIGHT 2004 ACS on STN

RN 294841-19-3 REGISTRY

CN L-Cysteine, L-glutaminyl-L-valyl-L-tyrosyl-L-leucyl- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 201: PN: WO0056755 SEQID: 176 unclaimed sequence

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 5

PATENT ANNOTATIONS (PNTE):

SEQ 1 QVYLC

MF C28 H44 N6 O8 S

SR CA

LC STN Files: CA, CAPLUS

DT.CA CAplus document type: Patent

RL.P Roles from patents: PRP (Properties)

Absolute stereochemistry.

HO2C R SH

ONH

NH2

$$i-pr$$
 S N

 $i-pr$ S

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 133:248084

L21 ANSWER 18 OF 30 REGISTRY COPYRIGHT 2004 ACS on STN

RN 286378-76-5 REGISTRY

CN L-Cysteine, L-serylglycyl-L-tryptophyl-L-cysteinyl-L-tyrosyl-L-arginyl-(9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 7

SEQ 1 SGWCYRC

MF C37 H51 N11 O10 S2

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER

DT.CA CAplus document type: Patent

RL.P Roles from patents: BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); PRP (Properties); USES (Uses)

Absolute stereochemistry.

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 133:140211

L21 ANSWER 19 OF 30 REGISTRY COPYRIGHT 2004 ACS on STN

RN 253274-50-9 REGISTRY

CN L-Cysteine, L-cysteinyl-L-asparaginyl-L-glutaminylglycyl-L-seryl-L-phenylalanyl-L-leucyl- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 24: PN: WO9967294 SEQID: 27 claimed sequence

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 8

PATENT ANNOTATIONS (PNTE):

SEQ 1 CNQGSFLC

RELATED SEQUENCES AVAILABLE WITH SEQLINK

MF C35 H54 N10 O12 S2

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

DT.CA CAplus document type: Patent

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 132:77610

L21 ANSWER 20 OF 30 REGISTRY COPYRIGHT 2004 ACS on STN

RN248250-62-6 REGISTRY

 $L-Cysteine, \ L-threonyl-L-\alpha-glutamyl-L-leucyl-L-\alpha-glutamyl-L-$ CN

tyrosyl-L-leucyl- (9CI) (CA INDEX NAME)

OTHER NAMES:

PN: US5972680 SEQID: 11 unclaimed sequence

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL

PATENT ANNOTATIONS (PNTE):

Sequence | Patent Source Reference Not Given US5972680 unclaimed SEQID 11

SEQ 1 TELEYLC

C38 H59 N7 O14 S MF

SR

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL DT.CA CAplus document type: Patent

Roles from patents: PRP (Properties)

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 131:319661

L21 ANSWER 21 OF 30 REGISTRY COPYRIGHT 2004 ACS on STN

226568-50-9 REGISTRY RN

CN

, mono(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 6

NTE modified (modifications unspecified)

----------- location ----- description undetermined modification modification

1 CIDYLC SEQ

RELATED SEQUENCES AVAILABLE WITH SEQLINK

MF C31 H48 N6 O10 S2 . C2 H F3 O2

SR

LC STN Files: CA, CAPLUS, USPATFULL DT.CA CAplus document type: Patent

RL.P Roles from patents: RACT (Reactant or reagent)

CM 1

CRN 226568-49-6

CMF C31 H48 N6 O10 S2

CM 2

CRN 76-05-1 CMF C2 H F3 O2

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 131:19306

L21 ANSWER 22 OF 30 REGISTRY COPYRIGHT 2004 ACS on STN

RN 226568-49-6 REGISTRY

CN L-Cysteine, L-cysteinyl-L-isoleucyl-L-α-aspartyl-L-tyrosyl-L-leucyl-(9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 6

SEO 1 CIDYLC

RELATED SEQUENCES AVAILABLE WITH SEQLINK

MF C31 H48 N6 O10 S2

CI COM

SR CA

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HN S Bu-i

HN S S Et

HN S S S Et

HN S S S Et
```

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L21 ANSWER 23 OF 30 REGISTRY COPYRIGHT 2004 ACS on STN
RN
                 214550-60-4 REGISTRY
                 L-Cysteine, \ L-\alpha-aspartyl-L-alanyl-L-\alpha-glutamyl-L-phenylalanyl-
CN
                 L-arginyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
                 2: PN: US20030073655 SEQID: 2 unclaimed sequence
CN
                  PROTEIN SEQUENCE; STEREOSEARCH
FS
SQL
PATENT ANNOTATIONS (PNTE):
Sequence | Patent
                                 Reference
Source
Not Given US2003073655
                                  unclaimed
                                 SEQID 2
SEQ
                                1 DAEFRC
MF
                 C30 H45 N9 O11 S
SR
                                                              CA, CAPLUS, TOXCENTER, USPAT7, USPATFULL
LC
                 STN Files:
DT.CA
                       CAplus document type: Journal; Patent
                        Roles from patents: PREP (Preparation); PRP (Properties); RACT
                          (Reactant or reagent)
                        Roles for non-specific derivatives from patents: BIOL (Biological
RLD.P
                         study); PRP (Properties); USES (Uses)
RL.NP Roles from non-patents: BIOL (Biological study); OCCU (Occurrence)
```

5 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

5 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 138:319696

REFERENCE 2: 134:28433

REFERENCE 3: 131:27965

REFERENCE 4: 131:17404

REFERENCE 5: 129:321146

L21 ANSWER 24 OF 30 REGISTRY COPYRIGHT 2004 ACS on STN

RN 204320-71-8 REGISTRY

CN L-Cysteine, L-cysteinylglycyl-L-leucyl-L-prolyl-L-arginyl-L-phenylalanyl-L-

arginyl- (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 8

SEQ 1 CGLPRFRC

MF C40 H66 N14 O9 S2

SR CA

LC STN Files: CA, CAPLUS, USPAT2, USPATFULL

DT.CA CAplus document type: Patent

RL.P Roles from patents: BIOL (Biological study); PRP (Properties); USES (Uses)

PAGE 1-B

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 128:216368

L21 ANSWER 25 OF 30 REGISTRY COPYRIGHT 2004 ACS on STN

RN 189023-76-5 REGISTRY

CN L-Cysteine, L-cysteinylglycyl-L-asparaginyl-L-prolyl-L-seryl-L-tyrosyl-L-arginyl- (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 8

SEQ 1 CGNPSYRC

MF C35 H54 N12 O12 S2

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

DT.CA CAplus document type: Patent

RL.P Roles from patents: BIOL (Biological study); PROC (Process); PRP (Properties); USES (Uses)

2 REFERENCES IN FILE CA (1907 TO DATE)

2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 133:9082

REFERENCE 2: 126:272341

L21 ANSWER 26 OF 30 REGISTRY COPYRIGHT 2004 ACS on STN

RN 167776-74-1 REGISTRY

CN L-Cysteine, L-cysteinyl-L-tryptophyl-L- α -aspartyl-L- α -aspartylglycyl-L-tryptophyl-L-leucyl- (9CI) (CA INDEX NAME) OTHER CA INDEX NAMES:

CN L-Cysteine, N-[N-[N-[N-[N-[N-(N-L-cysteinyl-L-tryptophyl)-L- α -aspartyl]-L- α -aspartyl]glycyl]-L-tryptophyl]-L-leucyl]-OTHER NAMES:

CN 331: PN: WO0024782 SEQID: 455 claimed sequence

CN 495: PN: WO0183525 TABLE: 9 claimed protein

CN 8: PN: WO0181377 SEQID: 23 claimed protein

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 8

PATENT ANNOTATIONS (PNTE):

Sequence | Patent | Reference | Reference

SEQ 1 CWDDGWLC

RELATED SEQUENCES AVAILABLE WITH SEQLINK

MF C44 H56 N10 O13 S2

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

DT.CA CAplus document type: Journal; Patent

RL.P Roles from patents: BIOL (Biological study); PROC (Process); PRP (Properties); USES (Uses)

RLD.P Roles for non-specific derivatives from patents: BIOL (Biological study); USES (Uses)

RL.NP Roles from non-patents: BIOL (Biological study); PROC (Process); PRP (Properties)

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

4 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

4 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 135:366701

REFERENCE 2: 135:352768

REFERENCE 3: 132:329919

REFERENCE 4: 123:191600

L21 ANSWER 27 OF 30 REGISTRY COPYRIGHT 2004 ACS on STN RN 150243-06-4 REGISTRY

CN L-Cysteine, N-[N-[N-[N2-(N-L-lysyl-L-valyl)-L-lysyl]-L-phenylalanyl]-L-histidyl]- (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 6

SEQ 1 KVKFHC

MF C35 H56 N10 O7 S

SR CA

LC STN Files: CA, CAPLUS

DT.CA CAplus document type: Journal

RL.NP Roles from non-patents: BIOL (Biological study)

Absolute stereochemistry.

PAGE 1-A

PAGE 2-A

- 1 REFERENCES IN FILE CA (1907 TO DATE)
- 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 119:157882

L21 ANSWER 28 OF 30 REGISTRY COPYRIGHT 2004 ACS on STN

RN 149420-20-2 REGISTRY

CN L-Cysteine, N-[N-[N-[N-[N-[N2-(N-L-methionylglycyl)-L-arginyl]-L-seryl]-L-histidyl]-L-phenylalanyl]-L-leucyl]- (9CI) (CA INDEX NAME)

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 8

SEQ 1 MGRSHFLC

MF C40 H63 N13 O10 S2

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER

DT.CA CAplus document type: Journal

RL.NP Roles from non-patents: BIOL (Biological study); OCCU (Occurrence)

Absolute stereochemistry.

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 119:201329

L21 ANSWER 29 OF 30 REGISTRY COPYRIGHT 2004 ACS on STN

RN 143756-07-4 REGISTRY

CN L-Cysteine, N-[N2-[N-[N-[N-(N-L-cysteinyl-L-valyl)-L-threonyl]glycyl]-L-histidyl]-L-tryptophyl]-L-arginyl]- (9CI) (CA INDEX NAME)
OTHER NAMES:

CN HSP71 Carboxyl-terminal region fragment (Mycobacterium tuberculosis)

FS PROTEIN SEQUENCE

SQL 8

SEQ 1 CVTGHWRC

MF C40 H60 N14 O10 S2

SR CA

LC STN Files: CA, CAPLUS

DT.CA CAplus document type: Journal; Patent

RL.P Roles from patents: USES (Uses)

RL.NP Roles from non-patents: BIOL (Biological study); OCCU (Occurrence)

PAGE 1-A

PAGE 1-B

$$\begin{array}{c|c} \text{O} & \text{NH}_2 \\ \parallel & \parallel \\ -\text{C---} \text{CH---} \text{CH}_2 -\text{SH} \end{array}$$

— Pr-i

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1:

119:201738

REFERENCE

2: 117:169125

L21 ANSWER 30 OF 30 REGISTRY COPYRIGHT 2004 ACS on STN

RN 110881-59-9 REGISTRY

OTHER CA INDEX NAMES:

CN L-Cysteine, N-[N-[N-[N-(N-L-tyrosyl-D-alanyl)glycyl]-L-phenylalanyl]-L-leucyl]-

OTHER NAMES:

CN 168: PN: US20030176421 PAGE: 54-55 claimed sequence

FS PROTEIN SEQUENCE; STEREOSEARCH

SQL 6

PATENT ANNOTATIONS (PNTE):

SEQ

1 YAGFLC

RELATED SEQUENCES AVAILABLE WITH SEQLINK

MF C32 H44 N6 O8 S

SR CA

LC STN Files: BIOTECHNO, CA, CAPLUS, EMBASE, MEDLINE, TOXCENTER, USPATFULL

DT.CA CAplus document type: Journal; Patent

RL.P Roles from patents: BIOL (Biological study); PRP (Properties); RACT

(Reactant or reagent); USES (Uses)

RL.NP Roles from non-patents: BIOL (Biological study); PROC (Process); PRP (Properties); USES (Uses)

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

___ SH

25 REFERENCES IN FILE CA (1907 TO DATE)

25 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:395537

REFERENCE 2: 139:255368

REFERENCE 3: 132:77836

REFERENCE 4: 127:229498

REFERENCE 5: 125:212481

REFERENCE 6: 124:155998

REFERENCE 7: 123:132693

REFERENCE 8: 122:306904

REFERENCE 9: 122:129480

REFERENCE 10: 122:46962

=> d ide 124 tot

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L24 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2004 ACS on STN
RN
     618445-89-9 REGISTRY
CN
    L-Cysteine, L-tyrosyl-L-histidyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN
     58: PN: WO03089595 SEQID: 58 unclaimed sequence
FS
     STEREOSEARCH
MF
    C18 H23 N5 O5 S
SR
    CA
LC
     STN Files:
                  CA, CAPLUS, USPATFULL
DT.CA CAplus document type: Patent
       Roles from patents: PRP (Properties)
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Absolute stereochemistry.

- 1 REFERENCES IN FILE CA (1907 TO DATE)
- 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

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             906 E3, E11-12
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L2
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L3
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L4
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                 E YANG W/AU
L5
             915 E3-29
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            1001 E3-87
Lб
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                 E BLOOD C/AU
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              13 E3,E9-10
                 E SHADIACK A/AU
              21 E3-7
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L11
L12
             17 L1-11 AND MELANOCORTIN/TI
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L27
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L28
             47 L25 AND (PRY<=1999 OR AY<=1999 OR PY<=1999 OR PRD<19990813 OR A
=> b hcap
FILE 'HCAPLUS' ENTERED AT 10:31:24 ON 21 JUN 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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FILE COVERS 1907 - 21 Jun 2004 VOL 140 ISS 26 FILE LAST UPDATED: 20 Jun 2004 (20040620/ED)

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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This file contains CAS Registry Numbers for easy and accurate substance identification.

'OBI' IS DEFAULT SEARCH FIELD FOR 'HCAPLUS' FILE

=> d bib abs hitrn retable 128 tot

CODEN: USXXAM

```
    L28 ANSWER 1 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
    AN 2004:327186 HCAPLUS
    DN 140:350620
    TI Claudin cell adhesion recognition sequence-based agents and methods for modulating claudin-mediated functions
    IN Blaschuk, Orest W.; Symonds, James Matthew; Gour, Barbara J.
    PA Adherex Technologies, Inc., Can.
    SO U.S., 127 pp., Cont.-in-part of U.S. Ser. No. 185,908.
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DT
     Patent
LΑ
     English
FAN.CNT 2
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	PATENT NO.		KI	ND	DATE			Α	PPLI	CATI	ои ис	ο.	DATE					
										-								
PΙ	US	6723	700		В	1	2004	0420		U	S 19	99-2	8202	9	1999	0330	<	
	US	2002	1932	94	A	1.	2002	1219		U	S 19	98-1	8590	8	1998	1103	<	
	WO	2000	0263	60	A	1	20000511			WO 1999-CA1029			19991103		<			
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			IN,	IS,	JP,	ΚE,	KG,	KΡ,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MA,
			MD,	MG,	MK,	MN,	MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,
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			AZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM								
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			DK,	ES,	FΙ,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,
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	JP	2003	5243	84	T	2	2003	0819		J.	P 20	00-5	7973:	2	1999	1103	<	
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	US	1999	-282	029	Α		1999	0330	<	-								
	WO	1999	-CA1	029	W		1999	1103	<	-								
OS	MAI	TAGS	140:	3506	20													

AΒ The invention provides methods for using modulating agents to enhance or inhibit claudin-mediated cell adhesion in a variety of in vivo and in vitro contexts. Within certain embodiments, the modulating agents may be used to increase blood/brain barrier permeability. The modulating agents comprise at least one claudin cell adhesion recognition sequence or an antibody or fragment thereof that specifically binds the claudin cell adhesion recognition sequence. Modulating agents may addnl. comprise one or more cell adhesion recognition sequence recognized by other adhesion mols. Such modulating agents may, but need not, be linked to a targeting agent, drug and/or support material.

IT 681451-61-6 681451-64-9

RL: PRP (Properties)

(unclaimed sequence; claudin cell adhesion recognition sequence-based agents and methods for modulating claudin-mediated functions)

RETABLE

Referenced Author	Year	VOL	PG	Referenced Work	Referenced
(RAU)	(RPY)	(RVL)	(RPG)	(RWK)	File
(1010)	, (101 1)	1 (1601)	, (101 0)	(101110)	1 1 1 1 0
	+====-	+====-	+=====	+======================================	+=======
Aberle	1997	16	3797	The EMBO Journal	HCAPLUS
Anon	1995			WO 9506122	HCAPLUS
Anon	1997			WO 9726001	HCAPLUS
Anon	2000	İ	5	USPTO Search-US-09-2	
Anon	2000	j .	2	USPTO Search-US-09-2	
Briehl	1991	5	1381	Molecular Endocrinol	HCAPLUS
Chen	1998	78	353	Lab Invest	HCAPLUS
Furuse	1998	141	1539	The Journal of Cell	HCAPLUS
Furuse	1998	143	391	The Journal of Cell	HCAPLUS
Hanna	1991	266	11307	The Journal of Biolo	İ
Katahira	1997	272	26652	The Journal of Biolo	HCAPLUS
Katahira	1997	136	1239	The Journal of Cell	HCAPLUS
Sonoda	1999	147	195	The Journal of Cell	j
	•	•	•	•	•

L28 ANSWER 2 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN

2003:737369 HCAPLUS AN

139:255368 DN

```
TI Prokinetic agents for treating gastric hypomotility and related disorders IN Watson, John W.; Andrews, Paul L. R.; Woods, Anthony J.
```

PA USA

SO U.S. Pat. Appl. Publ., 57 pp.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE		APPLICATION NO.	DATE
ΡI	US 2003176421	A1	20030918		US 1999-476253	19991230 <
PRAI	US 1999-476253		19991230	<		
Oς	MADDAT 120,25526	2				

GI

Stasis is treated or prevented in all or any part or parts of the stomach AΒ of a patient, especially a human patient, in need of such treatment, where said stasis results from hypomotility in the stomach, particularly gastric hypomotility with delayed emptying of the liquid and/or solid contents of the stomach. Gastric or gastrointestinal disorders are also treated which are characterized by one or more symptoms selected from pain, nausea, vomiting, heartburn, postprandial discomfort, indigestion and qastroesophageal reflux. Such treatment or prevention is achieved by administering to the patient a therapeutically effective amount of an inhibitor of phosphodiesterase-4 (PDE4), including isoenzyme subtypes thereof, sufficient to treat or prevent such hypomotility or gastric or gastrointestinal disorder in said patient. The PDE4 inhibitor comprises I or II [preferrably R = cyclopentyl or cyclohexyl; R1 = (C1-C2) alkyl; one of R2a and R2b = H and the other = Q; dashed line = single bond; m = 0, R113 and R114 are cis to each other; R113 = CN, R115 = H, R114 = carboxy, -CH2OH, -CH2C(=0)NH2]. Pharmaceutical compns. are also described which are useful for carrying out the above-mentioned methods of treatment and prevention, and which are also useful in the treatment of a gastric or qastrointestinal disorder in a patient which comprises with respect to said patient, (i) a sign or concomitant of diabetic neuropathy, anorexia nervosa, achlorhydria, gastrointestinal surgery, post-surgical recovery in the period of emergence from general anesthesia; or the administration of morphine and morphine-like opioids; (ii) a secondary aspect of a primary disease or disorder in said patient which is organic, wherein said disease or disorder involves particularly a gastroenteric or gastroesophageal organ or tissue, or an organ or tissue of the central nervous system of said patient; or (iii) an adverse side effect of a different therapeutic agent administered to said patient in the course of treating another unrelated disease or disorder in said patient.

IT 110881-59-9

RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(as auxiliary therapeutic agent; prokinetic phosphodiesterase-4 inhibitor agents for treating gastric hypomotility and related

disorders)

```
ANSWER 3 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
L28
AN
     2003:300608 HCAPLUS
DN
     138:319696
TI
     Antibodies specific to amyloid \beta peptide for treating amyloid
     deposition-related diseases such as Alzheimer's disease
IN
     Chain, Daniel G.
PA
     U.S. Pat. Appl. Publ., 28 pp., Cont.-in-part of U.S. Ser. No. 402,820.
SO
     CODEN: USXXCO
DT
     Patent
LA
     English
FAN.CNT 2
     PATENT NO.
                      KIND DATE
                                           APPLICATION NO. DATE
                                           -----
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                                         US 2002-84380
                                                            20020228 <--
PΙ
     US 2003073655 A1 20030417
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                     A1 19981015
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             NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT,
             UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
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             CM, GA, GN, ML, MR, NE, SN, TD, TG
                     A1 20030912
                                         WO 2002-US31590 20021021
     WO 2003074081
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             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
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             NE, SN, TD, TG
                     P 19970409 <--
PRAI US 1997-41850P
     WO 1998-US6900
                      W
                            19980409 <--
     US 1999-402820
                      A2
                            19991012
                                      <--
     US 2002-84380
                      Α
                            20020228
     The invention relates to methods of treating a subject having Alzheimer's
AΒ
     Disease, comprising the step of administering an antibody mol. which is
     targeted to \beta amyloid peptide or to fragment thereof. In another
     embodiment the invention relates to methods of treating a disease or a
     disorder, characterized by amyloid beta deposition. In another
     embodiment, the invention relates to an antibody mol., which is free
     end-specific for the N-terminus or the C-terminus of an amyloid \beta
     peptide and to a pharmaceutical composition thereof. In another embodiment,
     the invention relates to an antibody mol., which is targeted to the free C
     or N-terminus of a N-and/or C-terminus truncated amyloid β peptide
     fragment. The antibodies are monoclonal antibodies, humanized antibodies,
     chimeric antibodies, bispecific antibodies, artificial antibodies, scFv,
     F(ab) or fragments.
TΤ
     214550-60-4
```

RL: PRP (Properties)

(unclaimed sequence; antibodies specific to amyloid β peptide for treating amyloid deposition-related diseases such as Alzheimer's disease)

```
ANSWER 4 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
    2001:861496 HCAPLUS
ΑN
DN
    136:4708
TI
    Marek's disease virus vaccines
IN
    Lee, Lucy F.; Nazerian, Keyvan; Witter, Richard L.; Wu, Ping; Yanagida,
    Noboru; Yoshida, Shiqeto
    The United States of America as Represented by the Secretary of
PA
    Agriculture, USA; Nippon Zeon Co., Ltd.
    U.S., 47 pp., Cont.-in-part of U.S. Ser. No. 499,474.
SO
    CODEN: USXXAM
DT
    Patent
    English
LΑ
FAN.CNT 2
    PATENT NO.
                    KIND DATE
                                       APPLICATION NO. DATE
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PΙ
    US 6322780
                   B1 20011127
                                      US 1996-709731
                                                        19960909 <--
    WO 9703187
                    A2 19970130
                                        WO 1996-US11360 19960705 <--
                    A3 19970320
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        RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
    US 2002085999 A1 20020704 US 2001-920848 20010803 <--
PRAI US 1995-499474
                     B2 19950707 <--
    WO 1996-US11360 A1 19960705 <--
    US 1996-709731 A3 19960909 <--
ΆR
    The authors disclose the sequence characterization of the UL32 gene
    encoding the gp82 polypeptide of Marek's disease virus. Also disclosed
    are recombinant viruses which are useful as vaccines for protecting
    against Marek's Disease. In one example, a recombinant fowlpox virus
    vector containing genes encoding Marek's disease virus glycoprotein B and
    glycoprotein gp82 under the control of a poxvirus promoter was shown to
```

elicit an enhanced protective immune response in antibody-neg. 1-day-old

chicks. IT 376597-97-6

RL: PRP (Properties)

(unclaimed sequence; marek's disease virus vaccines)

KETABLE					
Referenced Author	Year	VOL	PG	Referenced Work	Referenced
(RAU)	(RPY)	(RVL)	(RPG)	(RWK)	File
	 +=====	, , , , }=====-	, . -======	, +====================================	-
Anon	1990			WO 9002803	
Blacklaws	1990	177	727	Virology	HCAPLUS
Boyle	1993	71	391	Immunology and Cell	HCAPLUS
Boyle	1988	10	343	Virus Research	HCAPLUS
Chang	1993	67	6348	Journal of Virology	HCAPLUS
Chang	1996	70	3938	Journal of Virology	HCAPLUS
Churchill	1969	221	744	Nature	MEDLINE
Coussens	1988	62	2373	J of Virology	HCAPLUS
Cui	1991	65	6509	J of Virology	HCAPLUS
Igarashi	1987	157	351	Virology	HCAPLUS
Nazerian	1994			US 5369025	HCAPLUS
Nazerian	1995			US 5403582	HCAPLUS
Nazerian	1992	66	1409	Journal of Virology	HCAPLUS
Ogawa	1990	8	486	Vaccine	HCAPLUS
Okazaki	1970	14	413	Avian Dis	MEDLINE
Reddy	1996	16	469	Vaccine	
Rispens	1972	16	108	Avian Disease	MEDLINE
Ross	1989	70	1789	Journal of Gen Virol	!
Ross	1991	72	939	Journal of General V	!
Schat	1978	60	1075	J Nat Cancer Inst	MEDLINE

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Whittaker
                        1992
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                                            Journal of General V HCAPLUS
Witter
                        1979
                                     145
                                            Avian Pathology
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Yanaqida
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Zelnick
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                                           Acta virologica
     ANSWER 5 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
AN
     2001:816705 HCAPLUS
DN
     Fc-domain-modified peptides as therapeutic agents
ΤI
IN
     Feige, Ulrich; Liu, Chuan-Fa; Cheetham, Janet C.; Boone, Thomas Charles;
     Gudas, Jean Marie
PA
     Amgen Inc., USA
SO
     PCT Int. Appl., 176 pp.
     CODEN: PIXXD2
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FAN.CNT 2
                                            APPLICATION NO. DATE
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                     A2
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             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
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                                            US 2003-666696
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PRAI US 2000-563286
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     US 1998-105371P
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     US 1999-428082
                       A2
                            19991022
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     WO 2001-US14310
                       W
                            20010502
AB
     The present invention concerns fusion of Fc domains with biol. active
     peptides and a process for preparing pharmaceutical agents using biol. active
     peptides. In this invention, pharmacol. active compds. are prepared by a
     process comprising: a) selecting at least one peptide that modulates the
     activity of a protein of interest; and b) preparing a pharmacol. agent
     comprising an Fc domain covalently linked to at least one amino acid of
     the selected peptide. Linkage to the vehicle increases the half-life of
     the peptide, which otherwise would be quickly degraded in vivo. The
     preferred vehicle is an Fc domain. The peptide can be selected, for
     example, by phage display, E.coli display, ribosome display, RNA-peptide
     screening, yeast-based screening, chemical-peptide screening, rational
     design, or protein structural anal.
     167776-74-1
IT
     RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES
     (Uses)
        (Fc-domain-modified peptides as therapeutic agents)
     ANSWER 6 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
L2.8
     2000:861520 HCAPLUS
ΆN
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DN

134:28433

```
Prevention and treatment of amyloidogenic disease
ΤI
     Schenk, Dale B.; Bard, Frederique; Vasquez, Nicki J.; Yednock, Ted
IN
    Neuralab Limited, Bermuda
PΑ
SO
     PCT Int. Appl., 143 pp.
     CODEN: PIXXD2
DT
     Patent
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     The invention provides improved agents and methods for treatment of
AB
     diseases associated with amyloid deposits of AB in the brain of a
     patient. Such methods entail administering agents that induce a
     beneficial immunogenic response against the amyloid deposit. The methods
     are useful for prophylactic and therapeutic treatment of Alzheimer's
     disease. Preferred agents including N-terminal fragments of A\beta and
     antibodies binding to the same.
IT
     214550-60-4
     RL: PRP (Properties)
        (Unclaimed; prevention and treatment of amyloidogenic disease)
    ANSWER 7 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
L28
     2000:742128 HCAPLUS
AN
DN
     133:291989
     Cloning and cDNA and deduced amino acid sequences of 49 human secreted
TΙ
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Rosen, Craig A.; Ruben, Steven M.; Komatsoulis, George
IN
    Human Genome Sciences, Inc., USA
PA
SO
    PCT Int. Appl., 540 pp.
     CODEN: PIXXD2
DT
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            MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,
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    US 2000-177049P
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     WO 2000-US9069
    The present invention relates to 49 novel human secreted proteins and
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     isolated nucleic acids containing the coding regions of the genes encoding
     such proteins. Tissue distribution, sequence homologies, and preferred
     epitope sites are provided for the secreted proteins, as well as
     chromosomal mapping of some of the genes. Also provided are vectors, host
     cells, antibodies, and recombinant methods for producing human secreted
     proteins in bacterial, insect, and mammalian cells. The invention further
     relates to diagnostic and therapeutic methods useful for diagnosing and
     treating disorders related to these novel human secreted proteins.
     High-throughput screening assays are also provided for various putative
     activities of the secreted proteins.
     300346-05-8P
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     RL: BOC (Biological occurrence); BPN (Biosynthetic preparation); BSU
     (Biological study, unclassified); PRP (Properties); THU (Therapeutic use);
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     (Uses)
        (amino acid sequence; cloning and cDNA and deduced amino acid sequences
        of 49 human secreted proteins)
RETABLE
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                      Year | VOL | PG
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Genetics Institute Inc |1998 |
                                        WO 9832853
                                                            HCAPLUS
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Hillier
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Human Genome Sciences I 1998
                                        |Recombinant DNA Seco|
                                  63
Watson
                      1994
    ANSWER 8 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
L28
     2000:688255 HCAPLUS
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     133:248084
     Cloning and cDNA and deduced amino acid sequences of 49 human secreted
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Rosen, Craig A.; Ruben, Steven M.; Komatsoulis, George

Human Genome Sciences, Inc., USA

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PΑ

proteins

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SO
    PCT Int. Appl., 419 pp.
    CODEN: PIXXD2
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    The present invention relates to 49 novel human secreted proteins and
AB
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    such proteins. Tissue distribution, sequence homologies, and preferred
     epitope sites are provided for the secreted proteins, as well as
     chromosomal mapping of some of the genes. Also provided are vectors, host
     cells, antibodies, and recombinant methods for producing human secreted
    proteins in bacterial, insect, and mammalian cells. The invention further
    relates to diagnostic and therapeutic methods useful for diagnosing and
     treating disorders related to these novel human secreted proteins.
    High-throughput screening assays are also provided for various putative
     activities of the secreted proteins.
TT
    294841-19-3
     RL: PRP (Properties)
        (unclaimed sequence; cloning and cDNA and deduced amino acid sequences
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Akeno, N
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Itoh, S
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Ohyama, Y
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                                                            HCAPLUS
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    ANSWER 9 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
L28
     2000:513459 HCAPLUS
ΑN
DN
     133:140211
     Homing pro-apoptotic conjugates for antitumor application
TI
     Ellerby, H. Michael; Bredesen, Dale E.; Pasqualini, Renata; Ruoslahti,
IN
     Erkki I.
     Burnham Institute, USA
PΑ
     PCT Int. Appl., 118 pp.
SO
     CODEN: PIXXD2
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     The present invention provides a homing pro-apoptotic conjugate, which
ΆB
     includes a tumor-homing mol. that selectively homes to a selected
     mammalian cell type or tissue linked to an antimicrobial peptide, where
     the conjugate is selectively internalized by the mammalian cell type or
     tissue and exhibits high toxicity thereto, and where the antimicrobial
    peptide has low mammalian cell toxicity when not linked to the
     tumor-homing mol. A homing pro-apoptotic conjugate of the invention can
    be, for example, D-amino acid-containing sequences CNGRC-GG-D(KLAKLAK)2 or
     ACDCRGDCFC-GG-D(KLAKLAK)2. The conjugates of the invention are useful,
     for example, for treating a patient with a tumor having angiogenic
    vasculature.
IT
    286378-76-5P
    RL: BAC (Biological activity or effector, except adverse); BOC (Biological
     occurrence); BPN (Biosynthetic preparation); BSU (Biological study,
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     study); OCCU (Occurrence); PREP (Preparation); USES (Uses)
        (homing pro-apoptotic conjugates for antitumor application)
L28
    ANSWER 10 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
AN
    2000:362568 HCAPLUS
DN
     133:9082
TI
    Method of identifying antitumor peptide or peptidomimetic molecules that
     home to a selected organ in vivo
     Ruoslahti, Erkki; Pasqualini, Renata
IN
PA
     The Burnham Institute, USA
SO
     U.S., 20 pp., Cont.-in-part of U.S. Ser. No. 813,273.
     CODEN: USXXAM
DT
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LΑ
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US 1997-862855 A1 19970623 <--US 1999-227906 A1 19990108 <--

AB The present invention provides methods for in vivo panning of a library to identify antitumor peptides or peptidomimetic mols. that specifically home to a selected organ. The method involves (1) administering to a subject a library of diverse peptide or peptidomimetic mols., wherein each of said diverse mols. is linked to a tag that facilitates recovery of said peptide or peptidomimetic mols., (2) collecting a sample of the selected organ or tissue, and (3) recovering a plurality of peptide or peptidomimetic mols. that home to said selected organ or tissue by isolating mols comprising said tag from said sample.

IT 189023-76-5

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) (method of identifying antitumor peptide or peptidomimetic mols. that home to a selected organ in vivo)

RETABLE	•	,	•		
Referenced Author	Year	VOL	PG	Referenced Work	Referenced
(RAU)	(RPY)	(RVL)	(RPG)	(RWK)	File
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Anon	1984			EP 0135277	HCAPLUS
Anon	1992			WO 9200091	HCAPLUS
Anon	1992		•	WO 9203461	HCAPLUS
Anon	1992			WO 9206191	HCAPLUS
Anon	1995			EP 0639584	HCAPLUS
Anon	1995			WO 9514714	HCAPLUS
Baillie	1995	72	257	British J Cancer	MEDLINE
Bender	1995			US 5415874	HCAPLUS
Bevilasqua	1992			US 5081034	HCAPLUS
Burinoni	1994	91	355	Proc Natl Acad Sci U	
Burrows	1994	64	155	Pharmac Ther	HCAPLUS
Burton	1991	88	10134	Proc Natl Acad Sci U	HCAPLUS
Capon	1993			US 5225538	HCAPLUS
Capon	1995			US 5428130	HCAPLUS
Cattani	1995	123	14120m		
Cattani	1995	18	135	Microbiologica	HCAPLUS
Davis	1996	24	702	Nucl Acids Res	HCAPLUS
Drolet	1996	14	1021	Nat Biotech	HCAPLUS
Dvorak	1991	3	77	Cancer Cells	MEDLINE
Goetz	1996	65	192	Int J Cancer	HCAPLUS
Gold	1993			US 5270163	HCAPLUS
Gold	1995	64	763	Annu Rev Biochem	HCAPLUS
Goodson	1994	91	7129	Proc Natl Acad Sci U	
Hendrikx	1996	24	129	Expt Hematol	MEDLINE
Hicke	1996	98	2688	J Clin Invest	HCAPLUS
Huang	1997	275	547	Science	HCAPLUS
Lamarco	1995			US 5453362	HCAPLUS
Lappi, D	1995	6	279	Cancer Biology	HCAPLUS
Lasky	1992			US 5098833	HCAPLUS
Lasky	1993			US 5216131	HCAPLUS
Lasky	1994			US 5304640	HCAPLUS
Leff, D	1997	8	2	Bioworld Today	
Martiny-Baron	1995	6	675	Current Biology	HCAPLUS
Miner	1982	42	4631	Cancer Research	MEDLINE
Pasqualini	1996	380	364	Nature	HCAPLUS
Pasqualini	1997	15	542	Nature Biotechnol	HCAPLUS
Pauli	1990	9	175	Cancer and Metastasi	
Quertermous	1994			US 5288846	HCAPLUS
Seed	1996			US 5506126	HCAPLUS

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1997
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Zhu
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                                          |Proc Natl Acad
     ANSWER 11 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
L28
     2000:291095 HCAPLUS
AN
DN
     132:329919
     Modified peptides containing an antibody Fc domain as therapeutic agents
ΤI
     Feige, Ulrich; Liu, Chuan-fa; Cheetham, Janet; Boone, Thomas Charles
IN
PA
     Amgen Inc., USA
     PCT Int. Appl., 608 pp.
SO
     CODEN: PIXXD2
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     The present invention concerns fusion of Fc domains with biol. active
AB
     peptides and a process for preparing pharmaceutical agents using biol. active
     peptides. In this invention, pharmacol. active compds. are prepared by a
     process comprising: (a) selecting at least one peptide that modulates the
     activity of a protein of interest; and (b) preparing a pharmacol. agent
     comprising an Fc domain covalently linked to at least one amino acid of
     the selected peptide. Linkage to the vehicle increases the half-life of
     the peptide, which otherwise would be quickly degraded in vivo.
     preferred vehicle is an Fc domain. The peptide is preferably selected by
     phage display, Escherichia coli coli display, ribosome display,
     RNA-peptide screening, or chemical-peptide screening.
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IT

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167776-74-1D, fusion protein with IgG1 Fc domain
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (integrin-binding peptide; modified peptides containing an antibody Fc
        domain as therapeutic agents)
     ANSWER 12 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
L28
AN
     2000:15227 HCAPLUS
DN
     132:77836
     Improved process for preparing Schiff base adducts of amines with
ΤI
     o-hydroxy aldehydes and compositions of matter based thereon
     Hay, Bruce Allan; Clark, Michael Thomas
TN
PΑ
     Pfizer Products Inc., USA
SO
     PCT Int. Appl., 78 pp.
     CODEN: PIXXD2
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LΑ
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             KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW,
             MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,
             ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,
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                                           AU 1999-38424
     AU 9938424
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                            20000117
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         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE,
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                                                             19990602 <--
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     US 2003125528
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     WO 1999-IB993
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     US 1999-337985
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     MARPAT 132:77836
AΒ
     An improved process is described for preparing Schiff base condensation
     adduct final products whose components comprise a protein having
     beneficial activity in animals, and an aromatic o-hydroxy aldehyde, which
     comprises bringing together the above-mentioned components in an aqueous
     environment at a pH of 7.0 or higher to form a reaction mixture, under
     conditions effective to drive said condensation reaction substantially to
     completion by removing from about 97.0 % to about 99.9 % by weight,
     preferably from about 98.0 % to about 99.0 % by weight of the water already
     present or produced during said condensation reaction, consistent with
     maintaining the integrity of the condensation reactants and adduct final
     product, and to assure a rate of conversion to said condensation adduct
     final product, i.e., with resulting yield of said condensation adduct
     final product of equal to or greater than about 98.5 % by weight, preferably
     equal to or greater than about 99.5 % by weight based on the weight of the
     reactants. Preferred aromatic o-hydroxy aldehydes comprise o-vanillin;
     salicylaldehyde; 2,3-dihydroxybenzaldehyde; 2,6-dihydroxybenzaldehyde;
     2-hydroxy-3-ethoxybenzaldehyde; or pyridoxal. A very wide range of
     proteins may be employed. The improved process provides yields over 90 %
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and substantially quant. conversion of the aldehyde and protein to the condensation adduct.

IT 110881-59-9

RL: FFD (Food or feed use); RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses) (improved process for preparing Schiff base adducts of peptide and protein amine groups with o-hydroxy aldehydes and compns. based thereon for food and drug use)

RETABLE

KUIADUD					
Referenced Author	Year	VOL	PG	Referenced Work	Referenced
(RAU)	(RPY)	(RVL)	(RPG)	(RWK)	File
=======================================	+=====	+====-		+====================================	+========
Anon				US 4886659 A	HCAPLUS
Anon				US 5633351 A	HCAPLUS
Brandon, D	1985	78	87	Journal of Immunolog	HCAPLUS
Clark	1993			US 5198422 A	HCAPLUS
Dalgety UK Limited	1988			EP 0284186 A	HCAPLUS
Dhont, J	1975		193	Aroma Res Proc Int S	HCAPLUS
Dzhagarov, B	1994	61	95 .	Zh Prikl Spektrosk	HCAPLUS
Neorx Corporation	1990			WO 9003401 A	HCAPLUS
Tomlinson, A	1993	48	3.73	Food Chemistry	HCAPLUS
Williams, J	1968	154	323	Biochim Biophys Acta	HCAPLUS
Zaugg, R	1977	252	8542	Journal of Biologica	HCAPLUS
Zhu, T	1994	5 .	312	Bioconjugate Chemist	HCAPLUS

- L28 ANSWER 13 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
- AN 1999:819417 HCAPLUS
- DN 132:77610
- TI Antigenic complex comprising immunostimulatory peptide, CD4, and chemokine receptor domain for HIV treatment and immune disorders
- IN Wang, Chang Yi
- PA United Biomedical Inc., USA
- SO PCT Int. Appl., 106 pp.
 - CODEN: PIXXD2
- DT Patent
- LA English
- FAN.CNT 1

FAN.		1 FENT :	NO.		KI	ND	DATE			A	PPLI	CATI	ON N	٥.	DATE			
ΡI	WO	9967	 294		A	1	1999:	1229		W	0 19	 99-U	S140	30	1999	0621	<	
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		9912					20010								1999			
	EP	1098													1999			
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		2000									A 20	00-6	385		2000	1107	<	
PRAI		1998					19980											
	WO	1999	-US14	4030.	W		19990	0621	<	-								

AB The invention provides peptides comprising a sequence homologous to a portion of the CDR-2 like domain of CD4, covalently linked to a helper T cell epitope, and optionally to other immunostimulatory sequences as well. The invention provides for the use of such peptides as immunogens to elicit the production in mammals of high titer polyclonal auto-antibodies, which are specific to CD4 surface complex. These auto-antibodies prevent binding of HIV viral particles to CD4+ cells. The peptides are useful in pharmaceutical compns., to provide an immunotherapy for HIV infection and to protect against HIV infection.

IT 253274-50-9

RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (antigenic complex comprising immunostimulatory peptide, CD4, and chemokine receptor domain for HIV treatment and immune disorders)

RETABLE

Referenced Author (RAU)	•	VOL (RVL)	Referenced Work (RWK)	Referenced File
	1995 1998	47	WO 9526365 A1	HCAPLUS HCAPLUS

- L28 ANSWER 14 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
- AN 1999:686625 HCAPLUS
- DN 131:319661
- TI An insulin-dependent membrane aminopeptidase from GLUT-4 containing vesicles and a cDNA encoding it
- IN Knowles, William J.; Guralski, Donna; Letsinger, John T.; Haigh, Wallace; Hart, John T.; Clairmont, Kevin B.
- PA Bayer Corporation, USA
- SO U.S., 51 pp., Cont.-in-part of U.S. Ser. No. 309,232, abandoned. CODEN: USXXAM
- DT Patent
- LA English

FAN.CNT 2

	PATENT NO.	KIND	DATE		APPLICATION NO.	DATE
						
PΙ	US 5972680	Α	19991026		US 1995-530792	19950919 <
	US 5968764	Α	19991019		US 1995-437116	19950504 <
	CA 2200354	AA	19960328		CA 1995-2200354	19950919 <
PRA	I US 1994-309232	B2	19940920	<		

AB An aminopeptidase which cleaves insulin has been purified from GLUT-4-containing vesicles and cloned. The peptidase has a measured mass of apprx.165 kDa, but is 110 kDa in its deglycosylated state. It has a predicted mol. weight of 117,239 based on the amino acid sequence predicted from the cDNA. Modulators of the activity of the aminopeptidase and a method for treating syndromes of insulin resistance, including diabetes, by administration of such a modulator are also claimed. Antibodies are raised against peptides of the enzyme. The enzyme was obtained from immunoaffinity-purified GLUT-4 vesicles as a 165-kDa protein and sequences from tryptic fragments identified it as an aminopeptidase and this was confirmed by anal. of substrate preferences and inhibition studies. A cDNA was cloned by PCR with amino acid sequence-derived primers.

IT 248250-62-6

RL: PRP (Properties)

(unclaimed sequence; insulin-dependent membrane aminopeptidase from GLUT-4 containing vesicles and a cDNA encoding it)

RETABLE

Referenced Author	Year	VOL	PG	Referenced Work	Referenced
(RAU)	(RPY)	(RVL)	(RPG)	(RWK)	File
		L 	L 	L	L

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James, D
                         1989
                               338
                                      83
                                             Letters to Nature
                                                                    HCAPLUS
Kandror
                                              J Biol Chem
                         1994
                               269
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Kandror
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                                      30777
                                              J Biol Chem
                         1994
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                                      8017
                                             Proc Natl Acad Sci
Kandror
                         1994
                                91
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                                             J Biol Chem
Keller
                         1995
                                270
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                                             J Biol Chem
Mastick
                         1994
                                      6089
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Rogi
                         1996
                                271
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                                             J Biol Chem
                                                                    HCAPLUS
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                                292
                                      388
                                             Archives of Biochem
Tsujimoto, M
                                                                    HCAPLUS
                                              J Biol, Chem
Verhey, K
                         1994
                               269
                                      2353
                                                                    HCAPLUS
WIPO
                         1992
                                             FR 9217575
L28
     ANSWER 15 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
AN
     1999:375416 HCAPLUS
DN
     131:27965
TΤ
     Prevention and treatment of amyloidogenic disease, especially Alzheimer's
     disease, based on induction of anti-amyloid immune response
TN
     Schenk, Dale B.
PA
     Athena Neurosciences, Inc., USA
SO
     PCT Int. Appl., 113 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 2
                       KIND
     PATENT NO.
                             DATE
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                                                                DATE
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             KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX,
             NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ,
         RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
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PRAI US 1997-67740P
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     WO 1998-US25386
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     US 2000-580015
                        A1
                             20000526
     US 2000-580018
                             20000526
                        Α1
AB
     The invention provides compns. and methods for treatment of amyloidogenic
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diseases. The methods entail administering an agent that induces a

beneficial immune response against an amyloid deposit in the patient. The methods are particularly useful for prophylactic and therapeutic treatment of Alzheimer's disease. In such methods, a suitable agent is $A\beta$ peptide or an antibody thereto.

IT 214550-60-4D, IgG conjugates

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(prevention and treatment of amyloidogenic disease, especially Alzheimer's disease, based on induction of anti-amyloid immune response)

RETABLE

Referenced Author (RAU)		VOL (RVL)	, ,	Referenced Work (RWK)	Referenced File
McMichael Prieels	1997 1994	+===== 		+=====================================	HCAPLUS HCAPLUS

L28 ANSWER 16 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1999:350685 HCAPLUS

DN 131:19306

- TI Preparation of cyclic peptides having VLA-4 (very late antigen-4) adhesion inhibitory activity and medicinal use thereof
- IN Takahashi, Toshiya; Saito, Nobuo; Takeshige, Hideyuki; Tanaka, Toshiaki;
 Kainoh, Mie
- PA Toray Industries, Inc., Japan
- SO PCT Int. Appl., 75 pp. CODEN: PIXXD2

DT Patent

LA Japanese

FAN CNT 1

FAN.	CNT 1			
	PATENT NO.	KIND	DATE	APPLICATION NO. DATE
ΡI	WO 9925731	A1	19990527	WO 1998-JP5096 19981112 <
	W: CA, JP,	US		
	RW: AT, BE,	CH, CY	, DE, DK,	ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
	PT, SE			
	EP 970965	A1	20000112	EP 1998-953029 19981112 <
	R: DE, FR,	GB, IT		
	US 6511961	B1	20030128	US 1999-341435 19990709 <
PRAI	JP 1997-311692	A	19971113	<
	WO 1998-JP5096	W	19981112	<
QS .	MARPAT 131:1930	6		
GI				

$$R^{1}-NH-A-B-C-D-E-F-CO_{2}R^{2}$$
 I

AB Claimed are cyclic peptides represented by general formula [I; A, F = L-or D-Cys, -homo-Cys, -Pen, or -MprI, Asp, Glu, Aad, Dpr, Dab, Orn; B = L-or D-Ala, -Ala(t-Bu), -Val, -Leu, -Ile, -alle, -Abu, -Nle, -Nva, -Tle, -Cha, -Chg, -Phe, -Phg, -Trp-, -Ala(3-Bzt), -Ala(1-Naph), -Ala(2-Naph), -Ala(2-Pyr), -Ala(2-Qui), -His, -Thi, -Ala(4-Thz), -2-Abz, -Pro, -homo-Pro, or -Tic; C = Asp analog, Glu analog, Aad analog, Asn analog, Gln analog, Ser, Ser(OMe), homo-Ser, Dpr, Dab, Orn, Met, Met(O), Met(O2), alle, Nle, Nva, Chg, Phg, Tyr, Tle, etc.; D = L- or D-Tyr, -Ser, -homo-Ser, -Leu, -Ile, -alle, -Nle, -Nva, -Chg, -Cha, -Val, Ala(t-Bu), -Abu, -Tle, -Ala,

-Phg, -homo-Phe, -Phe, -Ala(2-Naph), -Ala(2-Pyr), -Ala(3-Bzt), Ala(1-Naph), -Ala(2-Qui), -Thi, -Ala(4-Thz), -2-Abz, -Trp, or -His; G = disulfide or amide bond; R1 = H, acyl; R2 = H, C1-6 linear or branched alkyl] and the use thereof as remedies for inflammations, in particular allergic inflammations or hepatitis. These peptides are useful for the treatment of inflammatory diseases, e.g. allergic inflammations such as bronchial asthma, atopic dermatitis, and allergic rhinitis, hepatitis, nephritis, chronic arthrorheumatism, autoimmune diseases, rejection after organ transplant, type-1 diabetes, Crohn's disease, reinfarction after surgery, and arteriosclerosis. H-Cys-Chg-Asp-His-Leu-Cys-OH (cyclic disulfide) in vitro inhibited the binding of VLA-4-IgG chimera protein to immobilized CS-1 peptide (H-Cys-Leu-His-Gly-Pro-Glu-Ile-Leu-Asp-Val-Pro-Ser-Thr-OH) with IC50 of 120 nM. H-Cys-Ile-Met(0)-His-Leu-Cys-OH (cyclic disulfide) in vivo inhibited the increase in serum level of aspartic acid aminotransferase (AST) and that of alanine aminotransferase (ALT) in mouse having concanavalin-induced hepatitis by 27.0 and 38.7% at 100 $\mu g/kg$, resp.

IT 226568-50-9

RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of cyclic peptides having VLA-4 (very late antigen-4) adhesion inhibitory activity for treatment of allergic inflammations and hepatitis)

RETABLE

Referenced Author (RAU)	Year (RPY)	VOL	PG (RPG)	Referenced Work	Referenced File
		+		;	+========
Athena Neurosciences, I				JP 10-506608 A	
Athena Neurosciences, I	1996			EP 769958 A1	HCAPLUS
Athena Neurosciences, I	1996			WO 96/1644 A1	
Texas Biotechnology Cor				JP 10-502349 A	
Texas Biotechnology Cor	1996			EP 767674 A1	HCAPLUS
Texas Biotechnology Cor	1996			WO 96/581 A1	

- L28 ANSWER 17 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
- AN 1999:184464 HCAPLUS
- DN 131:17404
- TI Immunohistochemical localization of amyloid β -protein with amino-terminal aspartate in the cerebral cortex of patients with Alzheimer's disease
- AU Arai, Tetsuaki; Akiyama, Haruhiko; Ikeda, Kenji; Kondo, Hiromi; Mori, Hiroshi
- CS Department of Neuropathology, Tokyo Institute of Psychiatry, Setagaya-ku, Tokyo, 156-8585, Japan
- SO Brain Research (1999), 823(1,2), 202-206 CODEN: BRREAP; ISSN: 0006-8993
- PB Elsevier Science B.V.
- DT Journal
- LA English
- AB We investigated immunohistochem. the localization of amyloid $\beta\text{-protein}\ (A\beta)$ with amino-terminal aspartate (N1[D]) in brains of patients with Alzheimer's disease, diffuse Lewy body disease and Down's syndrome. A monoclonal antibody, 4G8, which recognizes the middle portion of A\beta, was used as a reference antibody to label the total A\beta deposits. Double staining with anti-A β (N1[D]) and 4G8 revealed that A β deposits in the subiculum and the neocortical deep layers often lacked N1[D] immunoreactivity, indicating N-terminal truncation of A β in these deposits. A β deposits in the neocortical superficial layers and the presubicular parvopyramidal layer always contained A β with N1[D]. Such regional as well as laminar differences in the distribution of A β beginning at N1[D] suggest that some local factors influence

N-terminal processing of $A\beta$ deposited in the brain.

IT 214550-60-4

RL: BOC (Biological occurrence); BSU (Biological study, unclassified);
BIOL (Biological study); OCCU (Occurrence)

(amyloid $\beta\text{-protein }N\text{-terminal}$ truncation in human brains with Alzheimer's disease, diffuse Lewy body disease and Down's syndrome)

RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Arai, T	1995	+==== 15	+===== 21	+=====================================	∤= ===== ==
Duyckaerts, C		!	!	Neuropathology	
	1986	70	249	Acta Neuropathol	MEDLINE
Haas, C	1994	269	17741	J Biol Chem	
Haas, C	1992	359	322	Nature	
Haas, C	1994	91	1564	Proc Natl Acad Sci U	
Iwatsubo, T	1994	13	45	Neuron	HCAPLUS
Jarret, J	1993	73	1055	Cell	
Kaneko, T	1994	345	172	J Comp Neurol	MEDLINE
Maggio, J	1992	89	5462	Proc Natl Acad Sci U	HCAPLUS
Pike, C	1995	270	23895	J Biol Chem	HCAPLUS
Prior, R	1996	148	1749	Am J Pathol	MEDLINE
Rogers, J	1985	5	2801	J Neurosci	MEDLINE
Saido, T	1995	14	457	Neuron	HCAPLUS
Saido, T	1996	215	173	Neurosci Lett	HCAPLUS
Scheuner, D	1996	2	864	Nat Med	HCAPLUS
Seubert, P	1992	359	325	Nature	HCAPLUS

- L28 ANSWER 18 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
- AN 1998:677841 HCAPLUS
- DN 129:321146
- TI DNA encoding recombinant antibodies specific for β -amyloid ends for inhibiting Alzheimer's disease
- IN Chain, Daniel G.
- PA Mindset Ltd., Israel; Mcinnis, Patricia, A.
- SO PCT Int. Appl., 59 pp. CODEN: PIXXD2
- DT Patent
- LA English

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ΡI															19980409 <			
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			DK,	EE,	ES,	FI,	GB,	GE,	GH,	GM,	GW,	HU,	ID,	IL,	IS,	JP,	KΕ,	KG,
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		3377										98-3			1998		-	
		2002										98-54			1998			
							20020704					01-9			2001			
							20030417				5 20	02-84	1380		2002	0228	<	
PRAI	US	1997	-418!	50P	P		19970	0409	<	; 								

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WO 1998-US6900 W 19980409 <--
US 1999-402820 A3 19991012 <--
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AB DNA encoding a recombinant antibody mol. end-specific for an amyloid- β peptide, pharmaceutical compns. thereof, and a method for preventing or inhibiting progression of Alzheimer's Disease by introducing such a DNA mol. into brain cells to express the recombinant antibody mol. and prevent the accumulation of amyloid- β peptides in the cerebrospinal fluid are disclosed.

IT 214550-60-4P

RL: PNU (Preparation, unclassified); RCT (Reactant); PREP (Preparation);
RACT (Reactant or reagent)

(DNA encoding recombinant antibodies specific for β -amyloid ends for inhibiting Alzheimer's disease)

RETABLE

Referenced Author (RAU)	Year (RPY)	VOL	PG (RPG)	Referenced Work (RWK)	Referenced File
Celltech Limited Hanan Ramont Univ Authority F	1989 1996	3	130	WO 8901975 A1 Amyloid:Int H Exp Cl	HCAPLUS
Solomon	1996	93	452	Proc Natl Acad Sci U	HCAPLUS
Solomon	1997	94	4109	Proc Natl Acad Sci U	HCAPLUS
Takeda Chemical Industr	1995			EP 0683234 A1	HCAPLUS

L28 ANSWER 19 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1998:163619 HCAPLUS

DN 128:216368

- TI Monoclonal antibodies that define unique meningococcal B epitopes and their use in the preparation of vaccine compositions
- IN Granoff, Dan; Moe, Gregory R.
- PA Chiron Corporation, USA
- SO PCT Int. Appl., 109 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.		1																		
	PATENT NO.					DATE	DATE			APPLICATION NO.					DATE					
PI	WO						1998	0305		W) 19	97-U	 S151	 67	1997	0827	<			
		RW:	ΑT,	BE,	CH,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE	
	EΡ	9220	59		A.	1	1999	0616		El	19	97-9	4137	1	1997	0827	<	-		
	ΕP	9220	59		В	1	2003	1022												
		R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,		
															1997	0827	<			
	JP	2001	5003	72	T:	2.	2001	0116		JI	19	98-5	1191	5	1997	0827	<			
	US	2002	19726	50	A.	l	2002	1226		US	3 20	01-9	1055	2	2001	0723	<			
	US	6642	354		B	2	2003	1104												
	US	2004	07784	40	A:	L	2004	0422		US	20	03-6	4346	5	2003	0819	<			
PRAI	US	1996	-2579	99P	P		1996	0827	<											
	US	1997	-9250	002	A.	l.	1997	0827	<											
	WO	1997	-US15	5167	, M		1997	0827	<											
	US	2000	-4948	322	B3	3	2000	0131												
	US	2001	-9105	552	A.	3	2001	0723												

AB Novel bactericidal antibodies against Neisseria meningitidis serogroup B ("MenB") are disclosed. The antibodies either do not cross-react or minimally cross-react with host tissue polysialic acid and hence pose minimal risk of autoimmune activity. The antibodies are used to identify

mol. mimetics of unique epitopes found on MenB or Escherichia coli K1 or anti-idiotype antibodies. Examples of such peptide mimetics are described that elicit serum antibody capable of activating complement-mediated bacteriolysis of MenB. Vaccine compns. containing such mimetics can be used to prevent MenB or E. coli K1 disease without the risk of evoking autoantibody.

TТ 204320-71-8

RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES

(monoclonal antibodies against Neisseria meningitidis serotype B capsular polysaccharide derivative are used for identifying or isolating mimetic epitopes as vaccine and for treating infections)

RETABLE

Referenced Author	Year	VOL	PG	Referenced Work	Referenced
(RAU)	(RPY)	(RVL)	(RPG)	(RWK)	File
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Jennings, H	1987	165	1207	JOURNAL OF EXPERIMAN	HCAPLUS
Jennings, H	1986	137	1708	JOURNAL OF IMMUNOLOG	HCAPLUS
Mosc Epidemiology & Mic	1992			SU 1708846 A	
Nat Res Council Canada	1991			WO 9108772 A	
Wellcome Found Ltd	1985			EP 0145359 A	HCAPLUS

- ANSWER 20 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN L28
- AN1997:525515 HCAPLUS
- DN 127:229498
- TIEvaluation of opioid receptor subtype antagonist effects in the ventral tegmental area upon food intake under deprivation, glucoprivic and palatable conditions
- AII Ragnauth, Andre; Ruegg, Hildegard; Bodnar, Richard J.
- CS Department of Psychology, Neuropsychology Doctoral Sub-Program, City University of New York, 65-30 Kissena Boulevard, Flushing, New York, USA
- Brain Research (1997), 767(1), 8-16 CODEN: BRREAP; ISSN: 0006-8993
- PΒ Elsevier
- DT Journal
- LA English

AB

Opioid receptor subtype antagonists differentially alter food intake under deprivation (24 h), glucoprivic (2-deoxy-D-glucose, 500 mg/kg, i.p.) or palatable (10% sucrose) conditions with μ (β -funaltrexamine) and κ (nor-binaltorphamine), but not $\delta 1$ ([D-Ala2,Leu5,Cys6]enkephalin) opioid antagonists reducing each form of intake following ventricular microinjection. Both μ and κ opioid antagonists microinjected into either the hypothalamic paraventricular nucleus or the nucleus accumbens reduce intake under deprivation and glucoprivic conditions. Palatable intake is reduced by both antagonists in the paraventricular nucleus, but only μ antagonists are active in the accumbens. Food intake is stimulated by μ and δ , but not κ, opioid agonists microinjected into the ventral tegmental area. The present study examined whether food intake under either deprivation, glucoprivic or palatable conditions was altered by bilateral administration of general (naltrexone), $\mu,~\kappa,~\delta 1$ or $\delta 2$ (naltrindole isothiocyanate) opioid antagonists into the ventral tegmental area. Deprivation (24 h)-induced feeding was significantly reduced by high $(50 \mu g)$, but not lower $(10-20 \mu g)$ doses of naltrexone (21%), and by $\delta 2$ (4 μg , 19%) antagonism in the ventral tegmental area. 2-Deoxy-D-glucose (500 mg/kg, i.p.)-induced hyperphagia was significantly reduced by high (50 μ g), but not lower (20 μ g) doses of naltrexone (64%), and by $\delta 2$ (4 μg , 27%) antagonism in the ventral tegmental area. Sucrose (10%) intake was significantly reduced by naltrexone (20-50 μ g, 25-39%) and δ 2 (4 μ g, 25%)

antagonism in the ventral tegmental area. Neither $\mu,\ \kappa$ nor δl antagonists were effective in reducing any form of intake following microinjection into the ventral tegmental area. These data indicate that the ventral tegmental area plays a relatively minor role in the elicitation of these forms of food intake, and that $\delta 2$, rather than $\mu,\ \kappa$ or δl opioid receptors appear responsible for mediation of these forms of intake by this nucleus.

IT 110881-59-9

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(evaluation of opioid receptor subtype antagonist effects in ventral tegmental area upon food intake under deprivation and glucoprivic and palatable conditions in relation to receptor mediation)

- L28 ANSWER 21 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
- AN 1997:310016 HCAPLUS
- DN 126:272341
- TI Molecules that home to a selected organ or tissue in vivo, and methods of identifying them
- IN Ruoslahti, Erkki; Pasqualini, Renata
- PA La Jolla Cancer Research Foundation, USA
- SO PCT Int. Appl., 76 pp.
 - CODEN: PIXXD2
- DT Patent
- LA English
- FAN.CNT 2

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		773441															
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		PT,															
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			FI														
	AT	195181 20031552		E	2000	00815		ΓA	' 19.	96-2	5019	5	1996	0910	<		
		9863740				30618		AU	19	98-6:	3740		1998	0430	<		
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	WO	1996-US1	4600	W	1996	OATO	<	•									

AB The present invention provides an in vivo method for identifying mols. that home to a selected organ or tissue. In addition, the invention provides peptides that home to a selected organ or tissue. For example, the

invention provides peptides that selectively home to an organ, e.g. brain or kidney, or to a tissue, e.g. a tumor tissue. The invention further provides methods of using an organ homing mol. e.g. to target an agent such as a drug to a selected organ or to identify the target mol. expressed by the selected organ. The invention also provides methods of targeting an organ or tissue containing angiogenic vasculature by contacting the organ or tissue with a mol. that specifically binds an αv -containing integrin. Methods are demonstrated for preparing a phage library and screening the library using in vivo panning to identify phage-expressing peptides that home to a selected organ or tissue; peptide sequences are included. The brain-homing peptide CLSSRLDAC directs red blood cells to the brain. Also described is use of in vivo panning to identify peptides homing to a breast tumor or a melanoma.

IT 189023-76-5

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (mols. homing to selected organ or tissue in vivo, and methods of identification and targeting)

L28 ANSWER 22 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1996:532938 HCAPLUS

DN 125:212481

- TI Reductions in locomotor activity following central opioid receptor subtype antagonists in rats
- AU Leventhal, Liza; Cole, Jessica L.; Bodnar, Richard J.
- CS Queens Coll., City Univ. New York, Flushing, NY, 11367, USA
- SO Physiology & Behavior (1996), 60(3), 833-836 CODEN: PHBHA4; ISSN: 0031-9384
- PB Elsevier
- DT Journal
- LA English
- AΒ Opioid agonists produce biphasic (decreases then increases) effects upon activity in rats. General opioid antagonists typically suppress activity. Selective opioid antagonists reduce weight and food intake. However, the latter effects cannot fully account for the former effects. To assess the possibility that selective opioid antagonists might decrease weight by increasing activity, the present study examined whether central administration of either μ (β -funaltrexamine: 20 μg), $\mu 1$ (naloxonazine: 50 μg), $\delta 1$ ([D-Ala2,Leu5,Cys6]enkephalin: 40 $\mu g)$, $\delta 2$ (naltrindole isothiocyanate: 20 $\mu g)$, or $\kappa 1$ (nor-binaltorphamine: 20 μg) opioid antagonists altered total, ambulatory, or stereotypic activity. Each of the antagonists significantly reduced total (μ : 18%, μ 1: 31%, δ 1: 42%, $\delta 2$: 37%, $\kappa 1$: 31%), ambulatory (μ : 17%, $\mu 1$: 27%, $\delta1$: 34%, $\delta2$: 37%, $\kappa1$: 31%), and stereotypic (μ : 19%, μ 1: 34%, δ 1: 49%, δ 2: 37%, κ 1: 31%) activity on the 1st day. All 3 activity measures were reduced by $\delta 1$ and $\delta 2$ antagonism on the 2nd day, whereas μ antagonism reduced total and stereotypic activity on the 2nd day. The activity redns. induced by selective opioid receptor subtype antagonists parallel effects induced by general opioid antagonism and suggest that antagonist-induced weight loss effects independent of intake redns. are not due to antagonist-induced hyperactivity.
- IT 110881-59-9
 - RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (redns. in locomotor activity following central opioid receptor subtype antagonists in rats)
- L28 ANSWER 23 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
- AN 1996:121113 HCAPLUS
- DN 124:155998

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ΤI
     Pharmaceutical compositions comprising an opiate antagonist and calcium
     salts and their use for the treatment of endorphin-mediated pathologies
ΤN
     Minoia, Paolo; Sciorsci, Raffaele Luigi
PA
     Italy
SO
     PCT Int. Appl., 19 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 1
     PATENT NO.
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         W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI,
             GB, GE, HU, IS, JP, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG,
             MN, MX, NO, NZ, PL, PT, RO, RU, SE, SG, SI, SK, TJ, TM, TT, UA,
             US, UZ
         RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT,
             LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE,
             SN, TD, TG
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                                           CA 1995-2190943 19950522 <--
     AU 9526149
                       A1
                            19951218
                                           AU 1995-26149
                                                            19950522 <--
     AU 708778
                       В2
                            19990812
     EP 760661
                       Α1
                            19970312
                                           EP 1995-920851
                                                            19950522 <--
     EP 760661
                       В1
                            19981230
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE
     CN 1151116
                      Α
                            19970604
                                           CN 1995-193758
                                                            19950522 <--
     CN 1083264
                       В
                            20020424
                       T2
     JP 10500423
                            19980113
                                           JP 1995-530058
                                                            19950522 <--
     HU 77920
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                            19981028
                                           HU 1996-3228
                                                            19950522 <--
     AT 175114
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                            19990115
                                           AT 1995-920851
                                                            19950522 <--
     ES 2128735
                       Т3
                            19990516
                                           ES 1995-920851
                                                            19950522 <--
     US 5811451
                       Α
                            19980922
                                           US 1996-737902
                                                            19961121 <--
PRAI IT 1994-MI1048
                       Α
                            19940524
                                      <--
     WO 1995-EP1931
                      W
                            19950522 <--
     Combined use of opiate antagonists and of calcium salts for the preparation of
AB
     medicaments for the treatment of endorphin-mediated pathologies is
     described. Cows with parenchymatous mastitis were treated for 2-3 days
     with naloxone-HCl 0.5 mg/100 kg, Ca gluconate 50 g, and protease
     (Endozym), showing complete remission of the symptoms.
IT
     110881-59-9
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
     (Uses)
        (compns. containing opiate antagonist and calcium salts for treatment of
        endorphin-mediated disorders in human and veterinary medicine)
     ANSWER 24 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
L28
     1995:781250 HCAPLUS
AN
     123:191600
DN
ΤI
     A peptide isolated from phage display libraries is a structural and
     functional mimic of an RGD-binding site on integrins
     Pasqualini, Renata; Koivunen, Erkki; Ruoslahti, Erkki
ΑU
     Cancer Research Center, La Jolla Cancer Research Foundation, La Jolla, CA,
CS
     92037, USA
SO
     Journal of Cell Biology (1995), 130(5), 1189-96
     CODEN: JCLBA3; ISSN: 0021-9525
PB
     Rockefeller University Press
DT
     Journal
     English
LA
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AB Many integrins recognize short RGD-containing amino acid sequences and such peptide sequences can be identified from phage libraries by panning with an integrin. Here, is a reverse strategy, the authors have used such libraries to isolate minimal receptor sequences that bind to fibronectin and RGD-containing fibronectin fragments in affinity panning. A predominant cyclic motif, *CWDDG/LWLC*, was obtained (the asterisks denote a potential disulfide bond). Studies using the purified phage and the corresponding synthetic cyclic peptides showed that *CWDDGWLC*-expressing phage binds specifically to fibronectin and to fibronectin fragments containing the RGD sequence. The binding did not require divalent cations and was inhibited by both RGD and *CWDDGWLC*-containing synthetic peptides. Conversely, RGD-expressing phage attached specifically to immobilized *CWDDGWLC*-peptide and the binding could be blocked by the resp. synthetic peptides in solution Moreover, fibronectin bound to a *CWDDGWLC*-peptide affinity column, and could be eluted with an RGD-containing peptide. The *CWDDGWLC*-peptide inhibited RGD-dependent cell attachment to fibronectin and vitronectin, but not to collagen. A region of the β -subunit of RGD-binding integrins that has been previously demonstrated to be involved in ligand binding includes a polypeptide stretch, KDDLW (in \$3) similar to WDDG/LWL. Synthetic peptides corresponding to this region in $\beta 3$ were found to bind RGD-displaying phage and conversion of its two aspartic residues into alanines greatly reduced the RGD binding. Polyclonal antibodies raised against the *CWDDWGLC*-peptide recognized $\beta 1$ and $\beta 3$ in immunoblots. These data indicate that the *CWDDGWLC*-peptide is a functional mimic of ligand binding sites of RGD-directed integrins, and that the structurally similar site in the integrin β subunit is a binding site for RGD.

IT 167776-74-1

RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process) (CWDDGWLC peptide isolated from phage display libraries is a structural and functional mimic of RGD-binding site on integrins)

- L28 ANSWER 25 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
- AN 1995:714707 HCAPLUS
- DN 123:132693
- TI Selective actions of central μ and κ opioid antagonists upon sucrose intake in sham-fed rats
- AU Leventhal, Liza; Kirkham, Tim C.; Cole, Jessica L.; Bodnar, Richard J.
- CS Department of Psychology and Neuropsychology Doctoral Sub-Program, Queens College, City University of New York, 65-30 Kissena Blvd., Flushing, NY, 11367, USA
- SO Brain Research (1995), 685(1,2), 205-10 CODEN: BRREAP; ISSN: 0006-8993
- PB Elsevier
- DT Journal
- LA English
- AB Intake of a palatable sucrose solution in real-fed rats is mediated in part by central μ and κ opioid receptors. Since general opioid antagonists still inhibit sucrose intake in sham-fed rats, the present study examined whether centrally administered μ (β -funaltrexamine: 5, 20 μg), mu1 (naloxonazine: 50 μg), κ (nor-binaltorphamine:
 - 1, 5, 20 μ g), δ (naltrindole: 20 μ g) or δ 1 (DALCE: 40
 - $\mu g)$ opioid subtype antagonists altered sucrose intake in sham-fed rats in a similar manner to systemic naltrexone (0.01-1 mg/kg) and whether such effects were equivalent to altering the sucrose concentration Sucrose (20%)

intake

in sham-fed rats was significantly and dose-dependently reduced by naltrexone (59%), β -funaltrexamine (44%) and nor-binaltorphamine (62%), but not by naloxonazine, naltrindole or DALCE. The redns. in sham

sucrose (20%) intake by general, μ and κ antagonism were similar in pattern and magnitude to diluting sucrose concentration from 20% to 10% in untreated sham-fed rats. Since both real-fed and sham-fed rats share similar patterns of specificity of opioid effects, magnitudes and potencies of inhibition, it suggests that central μ and κ antagonism acts on orosensory mechanisms supporting sucrose intake.

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(selective actions of central μ and κ opioid antagonists upon sucrose intake in sham-fed rats)

- L28 ANSWER 26 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
- AN 1995:579460 HCAPLUS

110881-59-9

DN 122:306904

IT

- TI Reductions in body weight following chronic central opioid receptor subtype antagonists during development of dietary obesity in rats
- AU Cole, Jessica L.; Leventhal, Liza; Pasternak, Gavril W.; Bowen, Wayne D.; Bodnar, Richard J.
- CS Neuropsychology Doctoral Subprogram Psychology Department, Queens College, Fushing, NY, USA
- SO Brain Research (1995), 678(1,2), 168-76 CODEN: BRREAP; ISSN: 0006-8993
- PB Elsevier
- DT Journal
- LA English
- Acute administration of long-acting general opioid antagonists reduces AB body weight and food intake in rats. In contrast, chronic administration of short-acting general opioid antagonists produces transient effects. present study evaluated whether chronic central administration of selective long-acting antagonists of μ (β -funaltrexamine, BFNA, 20 $\mu g)$, $\mu 1$ (naloxonazine, 50 $\mu g)$, $\delta 1$ ([D-Ala2,Leu5,Cys6]-enkephalin, DALCE, 40 $\mu g)$, $\delta 2$ (naltrindole isothiocyanate, NTII, 20 $\mu g)$ or κ (nor-binaltorphimine, NBNI, 20 $\mu g)$ opioid receptor subtypes altered weight and intake of rats exposed to a palatable diet of pellets, fat, milk and water, relative to pellet-fed and diet-fed controls. Diet-fed rats receiving chronic vehicle injections significantly increased weight (7-10%) and intake over the 11-day time course. Weight was significantly reduced over the time course in rats administered either BFNA (9%), naloxonazine (12%), DALCE (7%) or NTII (6%). Initial weight redns. failed to persist following chronic NBNI. All antagonists chronically reduced fat intake, but did not systematically alter total intake, pellet intake or milk intake relative to the pattern of weight loss. These data indicate that central μ , μ 1, δ 1, $\delta 2 \,,\,$ and, to a lesser degree, κ receptors mediate long-term opioid modulation of weight even in animals maintained on diets that ultimately result in dietary obesity.
- IT 110881-59-9

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(body weight and food intake response to chronic administration of central opioid receptor subtype antagonists during development of dietary obesity)

- L28 ANSWER 27 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
- AN 1995:360535 HCAPLUS
- DN 122:129480
- TI Analysis of central opioid receptor subtype antagonism of hypotonic and hypertonic saline intake in water-deprived rats
- AU Bodnar, Richard J.; Glass, Michael J.; Koch, James E.

- CS Queens College, City University New York, Flushing, NY, 11367, USA
- SO Brain Research Bulletin (1995), 36(3), 293-300 CODEN: BRBUDU; ISSN: 0361-9230
- PB Elsevier
- DT Journal
- LA English
- AB Intake of either hypotonic or hypertonic saline solns. is modulated in part by the endogenous opioid system. Morphine and selective mu and delta opioid agonists increase saline intake, while general opioid antagonists reduce saline intake in rats. The present study evaluated whether intracerebroventricular administration of general (naltrexone) and selective mu (beta-funaltrexamine, 5-20 µg), mu1 (naloxonazine, 50 μg), kappa (nor-binaltorphimine, 5-20 μg), delta (naltrindole, 20 $\mu g)$, or deltal (DALCE, 40 $\mu g)$ opioid receptor subtype antagonists altered water intake and either hypotonic (0.6%) or hypertonic (1.7%) saline intake in water-deprived (24 h) rats over a 3-h time course in a two-bottle choice test. Whereas peripheral naltrexone (0.5-2.5 mg/kg) significantly reduced water intake and hypertonic saline intake, central naltrexone (1-50 μ g) significantly reduced water intake and hypotonic saline intake. Water intake was significantly reduced following mu and kappa receptor antagonism, but not following mu1, delta, or deltal receptor antagonism. In contrast, neither hypotonic nor hypertonic saline intake was significantly altered by any selective antagonist. These data are discussed in terms of opioid receptor subtype control over saline intake relative to the animal's hydrational state and the roles of palatability and/or salt appetite.
- IT 110881-59-9

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(anal. of central opioid receptor subtype antagonism of hypotonic and hypertonic saline intake in water-deprived rats)

- L28 ANSWER 28 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
- AN 1995:273703 HCAPLUS
- DN 122:46962
- TI Binding affinity and selectivity of opioids at mu, delta and kappa receptors in monkey brain membranes
- AU Emmerson, Paul J.; Liu, Man-Ru; Woods, James H.; Medzihradsky, Fedor
- CS Departments Pharmacology, University Michigan Medical School, Ann Arbor, MI, USA
- SO Journal of Pharmacology and Experimental Therapeutics (1994), 271(3), 1630-7
 CODEN: JPETAB; ISSN: 0022-3565
- PB Williams & Wilkins
- DT Journal
- LA English
- The binding parameters of radiolabeled DAMGO (mu), DPDPE and pCl-DPDPE (delta) and U 69593 (kappa) and the affinity and selectivity profiles of various opioid agonists and antagonists at the three opioid receptor types were determined in membranes from brain cortex of rhesus monkey. Among the 10 opioids with established mu-selective actions, etonitazene inhibited the binding of [3H]DAMGO with a Ki of 0.02 nM (0.01 nM without sodium) and exhibited mu/delta and mu/kappa selectivities of 8800 and 11,650, resp. DAMGO had a Ki of 1.23 nM and was about 500-fold more selective at mu receptors compared with delta and kappa sites. Other mu opioids with higher than 100-fold binding selectivity were fentanyl and sufentanil. Highly 100-fold binding selectivity were fentanyl and sufentanil. Highly selective delta opioids were DPDPE, deltorphin II and naltrindole. With the exception of N,N-diallyl-Tyr-Aib-Aib-Phe-Leu-OH, all investigated

putative delta opioids bound to delta sites with low Kis, i.e., 0.04 nM, 0.13 nM and 1.4 nM for naltrindole, (\pm)-4-[(α -R*)- α - $\label{eq:continuous} \begin{tabular}{ll} \{ (2S*,5R*)-4-allyl-2,5-dimethyl-1-piperazinyl \}-3-hydroxybenzyl]-N,N-dimethyl-1-piperazinyl \}-3-hydroxybenzyl]-N,N-dimethyl-1-piperazinyl \}-3-hydroxybenzyl]-N,N-dimethyl-1-piperazinyl \}-3-hydroxybenzyl]-N,N-dimethyl-1-piperazinyl \}-3-hydroxybenzyl]-N,N-dimethyl-1-piperazinyl]-N,N-dim$ diethylbenzamide and DPDPE, resp. In this series, the displacement of [3H] pCl-DPDPE yielded results similar to those obtained with [3H] DPDPE. With nanomolar Kis of 0.70, 0.89, 0.25 and 0.06, resp., the highest kappa selectivity was displayed by (trans)-(±)-3,4-dichloro-N-methyl-N-[2-(1pyrrolidinyl)-cyclohexyl]benzeneacetamide and U 69593, followed by dynorphin 1-13 and norbinaltorphimine. Both ethylketocyclazocine and bremazocine bound with high affinity to all three receptor types, showing a 15- to 127-fold preference for the kappa receptor. The binding of mu-, delta-, and kappa-selective agonists and antagonists exhibited distinct sensitivities to sodium. The results of this study, which revealed picomolar binding affinity and receptor selectivity up to 11,600-fold in the primate brain, should aid in interpreting opioid actions in vivo and in selecting receptor-specific ligands to characterize opioid receptor mechanisms in vitro.

IT ' **110881-59-9**

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(binding affinity and selectivity of opioid receptors in monkey brain membranes)

- L28 ANSWER 29 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
- AN 1994:645948 HCAPLUS
- DN 121:245948
- TI Selective alterations in macronutrient intake of food-deprived or glucoprivic rats by centrally-administered opioid receptor subtype antagonists in rats
- AU Koch, James E.; Bodnar, Richard J.
- CS Department of Pharmacology, Mount Sinai School of Medicine, New York, NY, 10029, USA
- SO Brain Research (1994), 657(1-2), 191-201 CODEN: BRREAP; ISSN: 0006-8993
- DT Journal
- LA English
- AB Two hypotheses have attempted to account for the abilities of opioid agonists and antagonists to resp. stimulate and inhibit food intake in rats. The first suggests that the opioid system selectively modulates fat intake, while the second suggests that the opioid system selectively alters intake of that macronutrient which the animal prefers. The present study evaluated these two hypotheses by examining total intake and individual macronutrient intake in either food-deprived (24 h) rats or rats made glucoprivic with 2-deoxy-D-glucose (2DG, 200 mg/kg, i.p.) following either vehicle treatment, systemic administration of naltrexone or intracerebroventricular administration of either naltrexone, the mu opioid antagonist, beta-funaltrexamine (B-FNA), the mul opioid antagonist, naloxonazine, the kappa opioid antagonist, nor-binaltorphimine (Nor-BNI), the delta opioid antagonist, naltrindole or the deltal opioid antagonist, DALCE. Systemic administration of naltrexone (0.5-5 mg/kg) significantly reduced carbohydrate, fat and total intake in deprived rats, and carbohydrate, fat, protein and total intake in glucoprivic rats. Central administration of naltrexone (5-50 μ g) significantly reduced fat and total intake in both deprived and glucoprivic rats. B-FNA (5-20 ug) significantly reduced carbohydrate, fat and total intake in both deprived and glucoprivic rats. Naloxonazine (10-100 μg) significantly reduced carbohydrate, fat and total intake in deprived rats, but failed to alter 2DG intake. Nor-BNI (5-20 ug) significantly reduced fat and total intake in glucoprivic rats, but failed to alter deprivation intake. Neither

naltrindole (20 $\mu g)$ nor DALCE (40 $\mu g)$ altered intake in deprived or glucoprivic rats. Carbohydrate or fat preference in deprived rats significantly increased the amount of explained variance in the inhibitory actions of central naltrexone, B-FNA and naloxonazine upon deprivation-induced intake. Carbohydrate or fat preference in glucoprivic rats significantly increased the amount of explained variance in the inhibitory actions of systemic and central naltrexone, B-FNA, naloxonazine and Nor-BNI upon 2-DG hyperphagia. These data are discussed in terms of the contentions that opioids either selectively alter fat intake per se or selectively alter the preferred macronutrient.

IT 110881-59-9, DALCE

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(opioid antagonists effects on macronutrient intake in food-deprived or glucoprivic rats)

- L28 ANSWER 30 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
- AN 1994:622406 HCAPLUS
- DN 121:222406
- TI Evidence for chemical differentiation of delta opioid receptor subtypes by the sulfhydryl reagent N-ethylmaleimide
- AU Tam, Linda; Rafferty, Michael F.
- CS Neurological Diseases Research, G. D. Searle and Co., Skokie, IL, 60077,
- SO Receptor (1994), 4(2), 81-91 CODEN: RECEE5; ISSN: 1052-8040
- DT Journal
- LA English
- AB In this study, the δ receptor-selective nonequil. affinity ligands, 5'-NTII and DALCE, and the nonspecific sulfhydryl reagent NEM were evaluated over a range of concns. and treatment conditions for their ability to selectively alter the binding properties of $\delta 1$ - or 82-preferring opioid radioligands in brain homogenate. Treatment of tissue prepns. with DALCE (0-10,000 nM) or NTII (0-10,000 nM) resulted in an equivalent concentration-dependent loss of binding capacity for the $\delta 1$ agonist 3H-DPDPE and the $\mu/\delta 2$ agonist 3H-DSLET. In contrast, treatment of tissue with NEM (0-8000 μM) resulted in greater loss of 3H-DPDPE binding. Scatchard anal. of the binding of 3H-DPDPE, 3H-DSLET, and 3H-NTII in 3 mM NEM-treated rat brain P2 preparation revealed an equivalent decrease in affinity for the agonist ligands, but a significantly greater decrease in Bmax for 3H-DPDPE compared with control tissue values. Comparison of the Ki values for a series of δ -selective compds. against 3H-DSLET binding in control vs. 3 mM NEM treated P2 fraction showed differential effects of NEM on affinity within the series that were consistent with a selective depletion of $\delta 1$ sites. Overall, these results indicate that NEM treatment selectively reduced $\delta 1$ receptor binding, resulting in a preparation that is enriched in $\delta 2$ sites.
- IT 110881-59-9, DALCE

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(evidence for chemical differentiation of delta opioid receptor subtypes by sulfhydryl reagent N-ethylmaleimide)

- L28 ANSWER 31 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
- AN 1994:125345 HCAPLUS
- DN 120:125345
- TI Differential modulation of angiotensin II and hypertonic saline-induced drinking by opioid receptor subtype antagonists in rats
- AU Ruegg, Hildegard; Hahn, Barry; Koch, James E.; Bodnar, Richard J.

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CS
     Neuropsychology Doctoral Sub-Program, Queens College, City University of
     New York, Flushing, NY, 11367, USA
     Brain Research (1994), 635(1-2), 203-10
SO
     CODEN: BRREAP; ISSN: 0006-8993
DT
     Journal
LA
     English
     Opioid modulation of ingestion includes general opioid antagonism of
AΒ
     different forms of water intake, µ2 receptor modulation of
     deprivation-induced water intake and \delta 2 receptor modulation of
     saccharin intake. Water intake is stimulated by both central
     administration of angiotensin II (ANG II) and peripheral administration of
     a hypertonic saline solution; both responses are reduced by general opioid
     antagonists. The present study examined whether specific opioid receptor
     subtype antagonists would selectively alter each form of water intake in
     rats. Whereas systemic naltrexone (0.1-2.5 mg/kg, s.c.) reduced water
     intake induced by either peripheral ANG II (500 µg/kg, s.c.) or
     hypertonic saline (3 mL/kg, 10%), intracerebroventricular (i.c.v.)
     naltrexone (1-50 µg) only inhibited central ANG II (20 ng)-induced
     hyperdipsia. Both forms of drinking were significantly and
     dose-dependently inhibited by the selective \kappa antagonist,
     nor-binaltorphamine (Nor-BNI, 1-20 µg). Whereas both forms of drinking
     were transiently reduced by the \mu-selective antagonist,
     \beta-funaltrexamine (\beta-FNA, 1-20 \mu g), the \mu1 antagonist,
     naloxonazine (40 \mu g) stimulated drinking following hypertonic saline.
     The \delta1 antagonist, [D-Ala2,Leu5,Cys6]-enkephalin (DALCE, 1-40 \mug)
     significantly reduced drinking following ANG II, but not following
     hypertonic saline; the \delta antagonist, naltrindole failed to exert
     significant effects. These data indicate that whereas \kappa opioid
     binding sites modulate hyperdipsia following hypertonic saline, µ2,
     δ1 and κ opioid binding sites modulate hyperdipsia following
     ANG II. The \mu 1 opioid binding site may normally act to inhibit
     drinking following hypertonic saline.
IT
     110881-59-9, DALCE
     RL: BIOL (Biological study)
        (angiotensin II- and hypertonic saline-induced water drinking in
        response to)
    ANSWER 32 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
T-28
AN
     1993:601738 HCAPLUS
DN
     119:201738
TI
     Peptide fragments of hsp71 of Mycobacterium tuberculosis, and their use in
     diagnosis of tuberculosis
     Ivanyi, Juraj; Elsaghier, Ashraf
ΙN
     Medical Research Council, UK
PA
     PCT Int. Appl., 53 pp.
     CODEN: PIXXD2
DТ
     Patent
LA
     English
FAN.CNT 1
     PATENT NO.
                      KIND
                            DATE
                                            APPLICATION NO.
                                                              DATE
     _ _ _ _ _ _ _ _ _ _ _ _
                             _ - - - - - - -
                                            WO 1993-GB87
                                                              19930115 <--
     WO 9314118
                      A1
                             19930722
         W: AU, CA, JP, US
         RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
                                            AU 1993-33586
                                                              19930115 <--
     AU 9333586
                       A1
                             19930803
PRAI GB 1992-949
                             19920117
                                       <--
                             19930115 <--
     WO 1993-GB87
     Peptides having a sequence the same as, or immunol. equivalent to, a linear
AΒ
     epitope of the carboxyl-terminal region of M. tuberculosis heat-shock
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proteins, e.g. hsp71, are useful for the diagnosis of paucibacillary

tuberculosis (TB). Methods of diagnosis of TB using the peptides and kits including the peptides are also disclosed. Peptide sequences are included, as are results of an ELISA using the peptides to test sera of TB patients. An ELISA using hsp70 antigens to detect antibodies in TB patients is also described.

IT 143756-07-4, Hsp71 carboxyl-terminal region fragment (Mycobacterium tuberculosis)

RL: USES (Uses)

(for tuberculosis immunochem. diagnosis)

- L28 ANSWER 33 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
- AN 1993:601329 HCAPLUS
- DN 119:201329
- TI Immunogenicity and antigenicity of chimeric picornaviruses which express hepatitis A virus (HAV) peptide sequences: Evidence for a neutralization domain near the amino terminus of VP1 of HAV
- AU Lemon, Stanley M.; Barclay, Wendy; Ferguson, Morag; Murphy, Paula; Li, Jing; Burke, Karen; Wood, David; Katrak, Kersi; Sangar, David; et al.
- CS Dep. Med., Univ. North Carolina, Chapel Hill, NC, 27599-7030, USA
- SO Virology (1992), 188(1), 285-95 CODEN: VIRLAX; ISSN: 0042-6822
- DT Journal
- LA English
- AB The authors evaluated the antigenic characteristics of chimeric picornaviruses created by inserting peptide sequences from hepatitis A virus (HAV) capsid proteins into the B-C loop of VP1 of Sabin strain type 1 poliovirus (PV-1). Fifteen viable chimeras were generated. Each retained the ability to be neutralized by polyclonal PV-1 antisera. chimeras (H15 and H2) stimulated production of low levels of HAV neutralizing antibodies in immunized rabbits or mice, although in both cases only a small fraction of immunized animals produced this response. chimera, which contains residues 13-24 of HAV VP1, elicited HAV neutralizing antibodies in three of nine rabbits and at least one of seven immunized mice. These results indicate that a neutralization domain exists in this region of VP1. However, human sera with high titers of antibodies to HAV failed to neutralize or immunoppt. this chimera, suggesting the absence of a antibody response to this neutralization domain following natural infection. Sera from rabbits immunized with H15 that did not develop HAV neutralizing antibodies contained antibodies reactive with the HAV peptide segment expressed by the H15 virus, indicating substantial differences in the specificities of antibodies elicited by this peptide segment among individual immunized rabbits. The H15 peptide insert was an effective antigen, as indicated by a high level of sensitivity of the H15 chimera to neutralization by a related anti-peptide antibody which was itself devoid of HAV neutralizing activity. One of 16 rabbits immunized with the H2 chimera (residues 101-108 of HAV VP1) developed HAV neutralizing antibodies, confirming both the presence and the highly conformational nature of a neutralization antigenic site involving these resides of HAV.
- IT 149420-20-2

RL: BAC (Biological activity or effector, except adverse); BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)

(of VP1 protein of hepatitis A virus, antigenicity of, structure in)

- L28 ANSWER 34 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
- AN 1993:557882 HCAPLUS
- DN 119:157882
- TI Identification of a linear neutralization site within the third variable region of the feline immunodeficiency virus envelope

Searched by Noble Jarrell 272-2556

- AU Lombardi, Stefania; Garzelli, Carlo; La Rosa, Corinna; Zaccaro, Lucia; Specter, Steven; Malvaldi, Gino; Tozzini, Franco; Esposito, Fulvio; Bendinelli, Mauro
- CS Dep. Biomed., Univ. Pisa, Pisa, 56127, Italy
- SO Journal of Virology (1993), 67(8), 4742-9 CODEN: JOVIAM; ISSN: 0022-538X
- DT Journal
- LA English
- AB Synthetic peptides were used to map linear B-cell epitopes of the third variable (V3) region of the feline immunodeficiency virus (FIV) external membrane glycoprotein gp120. The anal. of sera from naturally and exptl. FIV-infected cats by Pepscan and enzyme immunoassay with four partially overlapping peptides evidence three antibody-binding domains, two of which mapped in the C-terminal half of V3. In particular, the V3.3 sequence (Gly-392-Phe-413) turned out to be important for in vitro neutralization of the virus in that the peptide inhibited the FIV-neutralizing activity of pooled immune cat sera, and cat sera raised against this peptide effectively neutralized FIV infectivity for Crandell feline kidney cells.
- IT 150243-06-4
 - RL: BIOL (Biological study)
 (of gp120 glycoprotein of feline immunodeficiency virus, in
 neutralizing antibody epitope mapping)
- L28 ANSWER 35 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
- AN 1993:531903 HCAPLUS
- DN 119:131903
- TI Mu-delta opioid interactions III: Differential antagonism of DPDPE-induced increases in morphine EEG and EEG power spectra by DALCE and naltrindole
- AU Stamidis, Helen; Young, Gerald A.
- CS Dep. Pharmacol. Toxicol., Univ. Maryland, Baltimore, MD, 21201, USA
- SO Peptides (New York, NY, United States) (1993), 14(3), 511-17 CODEN: PPTDD5; ISSN: 0196-9781
- DT Journal
- LA English
- AB In the present study, the effects of DALCE ([D-Ala2,Leu5,Cys6]enkephalin) and naltrindole on DPDPE ([D-Pen2, D-Pen5] enkephalin) - induced increases in morphine EEG and EEG power spectra were assessed. Adult female Sprague-Dawley rats were implanted with cortical EEG electrodes and permanent indwelling ICV and IV cannulae. Rats were pretreated with ICV DALCE at 15.7 nmol, ICV naltrindole at 20 nmol, or ICV sterile water. Rats were then administered ICV DPDPE at 2.5 nmol or ICV sterile water followed, 10 min later, by IV morphine at 3 mg/kg. Morphine-induced changes in EEG global (1-50 Hz) spectral parameters, the duration of morphine-induced high-voltage EEG bursts, the duration of EEG and behavioral excitation, and the latency to onset of slow-wave sleep were The DALCE pretreatment significantly decreased morphine-induced total spectral power seen in the DPDPE + morphine group. pretreatment reversed the effects of DPDPE on the duration of morphine-induced EEG bursts and the duration of EEG and behavioral excitation. The ICV naltrindole, however, had no significant effect on DPDPE-induced increases in morphine EEG, EEG spectral parameters, and behavior. These data, therefore, suggest that DPDPE may be increasing the effects of morphine on EEG through DALCE-sensitive delta opioid receptors associated within the mu-delta opioid receptor complex.
- IT 110881-59-9
 - RL: BIOL (Biological study) (δ -opioid receptors sensitivity to, in μ - δ -receptor complex)
- L28 ANSWER 36 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN

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Russel 10/049718
                                                                                 Page 66
AN
     1993:248026 HCAPLUS
DN
     118:248026
     Evidence for a single functional opioid delta receptor subtype in the
TI
     mouse isolated vas deferens
     Wild, K. D.; Carlisi, V. J.; Mosberg, H. I.; Bowen, W. D.; Portoghese, P.
ΑU
     S.; Sultana, M.; Takemori, A. E.; Hruby, V. J.; Porreca, F.
     Health Sci. Cent., Univ. Arizona, Tucson, AZ, USA
CS
     Journal of Pharmacology and Experimental Therapeutics (1993),
SO
     264(2), 831-8
     CODEN: JPETAB; ISSN: 0022-3565
DT
     Journal
     English
LA
     The identification of opioid \delta receptor subtypes in mouse brain led
AB
     to the investigation of the nature of the opioid \delta receptors in the
     mouse isolated vas deferens in vitro. Noncumulative concentration-effect
curves
     were constructed for DPDPE (δ, agonist) and [D-Ala2,Glu4]deltorphin
     (\delta 2 agonist) in control tissues, or in tissues which had been
     incubated with either [D-Ala2, Leu5, Cys6] enkephalin (DALCE) (noncompetitive
     δ1 antagonist) or 5'-naltrindole isothiocyanate (5'-NTII)
     (noncompetitive \delta 2 antagonist). Incubation of the tissues with
     DALCE, under either oxygenated or nonoxygenated conditions, did not alter
     the concentration-effect curves for either agonist. In contrast, incubation of
     the tissues with 5'-NTII resulted in a rightward displacement of the
     concentration-effect curves of both DPDPE and [D-Ala2,Glu4]deltorphin. Addnl.,
     naltriben, a selective and competitive δ2 antagonist, showed no
     difference in its ability to antagonize a fixed, submaximal concentration of
     either DPDPE or [D-Ala2,Glu4]deltorphin. Furthermore, there was no
     difference in the affinity of naloxone (i.e., pA2) at the receptor(s)
     acted upon by either DPDPE or [D-Ala2,Glu4]deltorphin. Tolerance to DPDPE
     or [D-Ala2,Glu4]deltorphin was produced by incubation of the tissues with
     these agonists; construction of the [D-Ala2,Glu4]deltorphin
concentration-effect
     curve in DPDPE-tolerant tissues demonstrated cross-tolerance between these
     agonists and, conversely, construction of DPDPE concentration-effect curves in
     [D-Ala2,Glu4]deltorphin-tolerant tissues revealed cross-tolerance between
     these agonists. Thus, the present data provide support for one subtype of
     opioid \delta receptor in the mouse isolated vas deferens based on (1)
     the lack of antagonism of the effects of both agonists selective for
     \delta 1 and \delta 2 receptor subtypes by DALCE, a \delta 1 antagonist,
     (2) the antagonism of \delta 1 and \delta 2 agonists by 5'-NTII or
     naltriben (\delta 2 antagonists), (3) the similar antagonist potency of NTB against either DPDPE or [D-Ala2,Glu4]deltorphin, (4) the lack of
     difference in the naloxone pA2 against either \delta agonist and (5) the
     demonstration of 2-way cross-tolerance between the effects of DPDPE and
     [D-Ala2,Glu4]deltorphin in this tissue.
IT
     110881-59-9
     RL: BIOL (Biological study)
         (δ-opioid receptors subtype affinity for, of vas deferens)
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ΑN 1992:585105 HCAPLUS

DN117:185105

L28

- A study of the effect of the irreversible delta receptor antagonist [D-Ala2, Leu5, Cys6] -enkephalin on δcx and δncx opioid binding sites in vitro and in vivo
- Rothman, Richard B.; Bykov, Victor; Jacobson, Arthur E.; Rice, Kenner C.; ΑU Long, Joseph E.; Bowen, Wayne D.
- Addict. Res. Cent., NIDA, Baltimore, MD, 21224, USA CS
- Peptides (New York, NY, United States) (1992), 13(4), 691-4 SO

ANSWER 37 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN

CODEN: PPTDD5; ISSN: 0196-9781

DT Journal

LA English

AB Several lines of data support the existence of 2 classes of delta receptors: the δ cx binding site, which is the δ binding site of the μ - δ opioid receptor complex, and the δ ncx, which is the noncomplexed δ receptor. [D-Ala2, Leu5, Cys6] enkephalin (DALCE) is an extended analog of [Leu5]enkephalin, which has been shown to bind irreversibly to δ receptors via the terminal cysteine by formation of a disulfide bond with the receptor. In vivo studies have shown that DALCE produces short-lived antinociceptive actions, followed by long-term antagonism of δ receptor-mediated antinociception. The major goal of the present study was to examine the effect of DALCE on the δcx and δ ncx binding sites in vitro and in vivo. Intracerebroventricular administration of 40 µg DALCE failed to decrease [3H] [D-Ala2, D-Leu5] enkephalin binding to the δcx and Sncx binding sites. Pretreatment of membranes with DALCE in vitro greatly reduced the Bmax of the δncx binding site, without altering the Bmax of the δ cx binding site. These findings suggest that when administered in vivo, DALCE fails to distribute uniformly throughout the brain, and that it therefore binds covalently to opioid receptors mostly in the periventricular regions. Viewed collectively, these data support the hypothesis that DALCE acts as a selective δ ncx antagonist, and that the δ ncx binding site, which is sensitive to DALCE, is most likely synonymous with the recently described $\delta 1$ receptor.

IT 110881-59-9

RL: BIOL (Biological study)

(8cx- and 8ncx-opioid receptor binding of, in brain regions)

- L28 ANSWER 38 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
- AN 1992:569125 HCAPLUS
- DN 117:169125
- TI Localization of linear epitopes at the carboxy-terminal end of the mycobacterial 71 kDa heat shock protein
- AU Elsaghier, Ashraf; Lathigra, Raju; Ivanyi, Juraj
- CS R. Prostgrad. Med. Sch., London, W12 OHS, UK
- SO Molecular Immunology (1992), 29(9), 1153-6 CODEN: MOIMD5; ISSN: 0161-5890
- DT Journal
- LA English
- AB Four distinct linear epitopes localized within species-specific sequences at the C-terminal end of the 71 kDa heat shock protein of Mycobacterium tuberculosis have been identified by scanning 94 overlapping peptides with 13 human sera. One epitope (C) of entirely M. tuberculosis-specific core sequence (GEAGPG) has been found immunogenic in smear-neg. tuberculosis, but not in non-tuberculous mycobacterial diseases. This peptide appears to be a valuable candidate for further serodiagnostic evaluation.
- IT 143756-07-4

RL: BAC (Biological activity or effector, except adverse); BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)

(of hsp71 protein of Mycobacterium tuberculosis, epitopes for humans in relation to)

- L28 ANSWER 39 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
- AN 1992:166601 HCAPLUS
- DN 116:166601
- TI Spinal opioid delta antinociception in the mouse: mediation by a 5'-NTII-sensitive delta receptor subtype

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ΑIJ
     Mattia, A.; Farmer, S. C.; Takemori, A. E.; Sultana, M.; Portoghese, P.
     S.; Mosberg, H. I.; Bowen, W. D.; Porreca, F.
CS
     Health Sci. Cent., Univ. Arizona, Tucson, AZ, USA
SO
     Journal of Pharmacology and Experimental Therapeutics (1992),
     260(2), 518-25
     CODEN: JPETAB; ISSN: 0022-3565
DТ
     Journal
LA
     English
ΔR
     Previous studies have indicated that i.c.v. pretreatment of mice with the
     novel, selective opioid \delta receptor antagonists, [D-
     Ala2, Leu5, Cys6] enkephalin (DALCE) and naltrindole-5'-isothiocyanate
     (5'-NTII), differentially antagonized the direct antinociceptive effects
     of [D-Pen2,D-Pen5]enkephalin (DPDPE) and [D-Ala2]deltorphin II (DELT).
     These findings, and others, suggested the existence of subtypes of opioid
     \delta receptors which could be classified as activated by DPDPE and
     DALCE sensitive (\delta1 receptor), or selectively activated by DELT and
     5'-NTII sensitive (\delta2 receptor). The present study has extended
     these observations to the characterization of \delta-mediated
     antinociception at the spinal level; thus, the direct antinociceptive
     effects of DPDPE and DELT after i.t. administration was studied in mice by
     using pretreatment with DALCE and 5'-NTII in order to selectively
     antagonize the \delta subtypes. Addnl., the acute antinociceptive
     actions of DALCE itself were studied to ensure activity of this compound at
     the spinal level. The resp. antinociceptive A50 value (95% CL) for i.t.
     DPDPE, DELT, and DALCE were 19.0, 19.3, and 2.0 nmol. The \delta
     antagonist, ICI 174,864, blocked the antinociceptive effects of DPDPE and
     DELT, but not those of i.t. morphine or [D-Ala2, NMPhe4, Gly-ol5] enkephalin
     (DAMGO), indicating that the observed antinociceptive effects of DPDPE and
     DELT were \delta mediated. Pretreatment 24 h before testing with graded
     doses of i.t. 5'-NTII blocked the i.t. antinociceptive effects of DPDPE
     and DELT, although at least a 10-fold higher dose of 5'-NTII was needed to
     produce equivalent antagonism of DPDPE. Similarly, i.t. pretreatment with
     5'-NTII antagonized i.t. DALCE. In contrast, 24 h of pretreatment with i.t. DALCE failed to block DPDPE, DELT or DALCE-induced antinociception.
     The antagonism of the spinal antinociceptive effects of DPDPE, DELT and
     DALCE by 5'-NTII, but not by DALCE, suggests that the spinal opioid
     \delta receptor involved in antinociception is a 5'-NTII sensitive (i.e.,
     \delta2) subtype.
TT
     110881-59-9
     RL: PRP (Properties)
        (spinal analysesic effects of, \delta opioid receptor subtypes in
        mediation of)
     ANSWER 40 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
AN
     1991:648347 HCAPLUS
DN
     115:248347
TI
     Differential antagonism of opioid delta antinociception by
     [D-Ala2, Leu5, Cys6] enkephalin and naltrindole 5'-isothiocyanate: evidence
     for delta receptor subtypes
ΑU
     Jiang, Q.; Takemori, A. E.; Sultana, M.; Portoghese, P. S.; Bowen, W. D.;
     Mosberg, H. I.; Porreca, F.
CS
     Health Sci. Cent., Univ. Arizona, Tucson, AZ, 85724, USA
     Journal of Pharmacology and Experimental Therapeutics (1991),
SO
     257(3), 1069-75
     CODEN: JPETAB; ISSN: 0022-3565
DT
     Journal
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The present study investigated the direct opioid δ receptor-mediated

antinociception produced by intracerebroventricular (i.c.v.)

administration of the highly selective δ agonists,

LΑ

AB

English

[D-Pen2, D-Pen5] enkephalin (DPDPE) and [D-Ala2] deltorphin II, as well as that of the less δ -selective [D-Ser2,Leu5,Thr6]enkephalin (DSLET), by using 2 novel nonequil. opioid antagonists, [D-Ala2, Leu5, Cys6] enkephalin (DALCE) and naltrinodole 5'-isothiocyanate (5'-NTII). At times ranging 8 - 48 h after a single i.c.v. pretreatment of mice with 5'-NTII, the antinociceptive effects of [D-Ala2]deltorphin II were antagonized. In contrast, 5'-NTII pretreatment at times between 10 min and 24 h failed to antagonize the antinociceptive effects of DPDPE. Previous studies have that pretreatment with i.c.v. DALCE produces a doseand time-related antagonism of DPDPE, but not morphine, antinociception. However, pretreatment with i.c.v. DALCE failed to antagonize the antinociceptive effects of [D-Ala2]deltorphin II. Similarly, i.c.v. administration of DSLET produced time- and dose-related antinociception which was partially antagonized by either β -funaltrexamine (β-FNA) or by ICI 174,864 (N,N-diallyl-Tyr-Aib-Aib-PHe-Leu-OH), suggesting mixed activity at μ and δ receptors. ICI 174,864 produced essentially complete antagonism of DSLET antinociception in β -FNA-pretreated mice. Pretreatment with 5'-NTII (at -8 to -48 h), blocked the antinociception produced by DSLET in control or in β -FNA-pretreated mice. In contrast, pretreatment with DALCE failed to antagonize the antinociception produced by i.c.v. DSLET in either control or in β -FNA-pretreated mice. These data show that the antinociceptive actions of [D-Ala2]deltorphin II and of DSLET are sensitive to the novel δ antagonist, 5'-NTII but not to DALCE. In contrast, the antinociception of DPDPE is sensitive to DALCE, but not to 5'-NTII. The differential antagonism of antinociception produced by these selective δ agonists suggests the existence of δ receptor subtypes.

IT 110881-59-9

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study) (δ -opioid receptor subtype antagonist)

- L28 ANSWER 41 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
- AN 1991:551136 HCAPLUS
- DN 115:151136
- TI Ingestive behavior following central [D-Ala2,Leu5,Cys6]-enkephalin (DALCE), a short-acting agonist and long-acting antagonist at the delta opioid receptor
- AU Arjune, Dulmanie; Bowen, Wayne D.; Bodnar, Richard J.
- CS Queens Coll., City Univ. New York, Flushing, NY, 11367, USA
- SO Pharmacology, Biochemistry and Behavior (1991), 39(2), 429-36 CODEN: PBBHAU; ISSN: 0091-3057
- DT Journal
- LA English
- AB DALCE (1-40 $\mu g\text{, intracerebroventricularly), a short-acting agonist and$ long-acting antagonist at the delta opioid receptor, was examined for its effects upon food intake in rats under spontaneous, deprivation, glucoprivic and palatable conditions. DALCE (10 μ g) stimulated free feeding for up to 10 h but only minimally decreased (40 μg) food intake and body weight after 24-72 h. DALCE, administered prior to food deprivation (24 h), failed to affect subsequent 24-h intake and sporadically decreased intake and body weight change after 48-72 h. 2-Deoxy-D-glucose (650 mg/kg, i.p.) hyperphagia was transiently (2 h) decreased by long-term DALCE (10 μg) pretreatment. Hyperphagia following exposure to a high-fat diet was potentiated by long-term DALCE (1 μ g) pretreatment. DALCE (10 μg) hyperphagia (2-10 h) was eliminated by central pretreatment with either naltrexone (20 µg) or the kappa antagonist, nor-binaltorphamine (20 μ g) but was minimally affected by central pretreatment with the mu antagonist, beta-funaltrexamine (20 μg) or long-term DALCE (40 μg).

The general inability of the antagonist actions of DALCE to alter these forms of feeding argues against a role for the delta opioid receptor in these responses.

IT 110881-59-9, DALCE

RL: BIOL (Biological study)

(feeding behavior response to central administration of, delta receptor involvement in relation to)

- L28 ANSWER 42 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
- AN 1991:136171 HCAPLUS
- DN 114:136171
- TI Pharmacological characterization of [D-Ala2,Leu5,Ser6]enkephalin (DALES): antinociceptive actions at the δ non-complexed-opioid receptor
- AU Mattia, Antonia; Vanderah, Todd; Mosberg, Henry I.; Omnaas, John R.; Bowen, Wayne D.; Porreca, Frank
- CS Health Sci. Cent., Univ. Arizona, Tucson, AZ, 85724, USA
- SO European Journal of Pharmacology (1991), 192(3), 371-5 CODEN: EJPHAZ; ISSN: 0014-2999
- DT Journal
- LA English
- AΒ Opioid δ receptors may be distinguished on the basis of their involvement in the modulation (i.e., increase or decrease in potency) of $\mu\text{-mediated}$ antinociception. Some opioid δ receptors may exist within a functional complex with μ receptors (Scomplexed (δcx) receptors), whereas other δ sites do not (δnon-complexed (δncx) receptors). [D-Ala2, Leu5, Cys6] enkephalin (DALCE) produces initial antinociceptive actions, does not modulate morphine antinociception, and appears to bind irreversibly to the δncx site, presumably by means of thiol-disulfide exchange between the receptor and the cysteine sulfhydryl group. To determine if a structural basis exists for actions at the hypothesized δ ncx receptor, the pharmacol. characterization of [D-Ala2,Leu5,Ser6]enkephalin (DALES), a close structural analog of DALCE, was reported. If a structural basis for action at the δ ncx site exists, then DALES would be predicted to produce antinociception, fail to modulate morphine antinociception, and (since it lacks the free sulfhydryl group present in DALCE) fail to exhibit irreversible antagonistic actions; these predictions were supported. These observations in vivo support the concept of a structural basis for activity at the hypothesized δncx site and suggest that DALES, like DALCE, may be a useful probe for pharmacol. characterization of putative δ receptor subtypes.
- IT 110881-59-9

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(analgesic activity of, δ -receptor mediation of)

- L28 ANSWER 43 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
- AN 1991:36264 HCAPLUS
- DN 114:36264
- TI Opioid agonist and antagonist antinociceptive properties of [D-Ala2,Leu5,Cys6]enkephalin: selection actions at the deltanoncomplexed site
- AU Qi, Jiang; Bowen, Wayne D.; Mosberg, Henry I.; Rothman, Richard B.; Porreca, Frank
- CS Health Sci. Cent., Univ. Arizona, Tucson, AZ, 85724, USA
- Journal of Pharmacology and Experimental Therapeutics (1990), 255(2), 636-41 CODEN: JPETAB; ISSN: 0022-3565
- DT Journal

LA English

AΒ The irreversibly binding enkephalin analog, [D-Ala2,Leu5,Cys6]enkephalin (DALCE) was used in an effort to determine whether selective agonist and antagonist properties could be demonstrated at hypothesized types of opioid delta receptors previously termed the deltanoncomplexed and the deltacomplexed sites. These putative subtypes of delta receptors have been functionally distinguished on the basis of involvement (i.e., deltacomplexed) in the modulation of mu-mediated effects such as antinociception. Intracerebroventricular (i.c.v.) administration of DALCE or the reference delta and mu agonists, [D-Pen2, D-Pen5] enkephalin (DPDPE) and morphine, to mice produced antinociception in the warm-water tail-flick test in a dose- and time-related manner. Maximal effects with DALCE were seen at 10 min and significant antinociception could be detected for .apprx.1 h; DALCE was 3- and 90-fold more potent than i.c.v. morphine and DPDPE, resp. The antinociceptive effects of i.c.v. DALCE and DPDPE, but not those of morphine, were antagonized by the selective delta antagonist, N, N-diallyl-Tyr-Aib-Aib-Phe-Leu-OH, suggesting that the antinociception associated with the peptides was mediated through a delta receptor. DALCE pretreatment up to 24 h before testing, a time at which this compound did not produce antinociception, blocked the i.c.v. DPDPE antinociceptive effect as well as that of DALCE itself, but not that of morphine, suggesting long-lasting DALCE antagonism at a delta receptor. Modulation of morphine antinociception was demonstrated with subeffective doses of i.c.v. DPDPE or [Met5]enkephalin, but not with subeffective doses of i.c.v. DALCE. In addition to a lack of modulation of morphine antinociception after acute administration, i.c.v. DALCE (at -24 h) did not directly antagonize the antinociceptive actions of morphine or block the modulation of morphine by DPDPE or [Met5]enkephalin. Apparently, i.c.v. DALCE given acutely produces direct antinociceptive actions through a supraspinal delta receptor, and DALCE may subsequently act as a long-lasting delta antagonist. However, unlike the actions of DPDPE or [Met5]enkephalin, neither the direct delta agonist or antagonist actions of DALCE are associated with indirect modulation of morphine antinociception. These findings provide further support for the concept of a functional opioid mu-delta receptor complex and support the existence of subtypes of opioid delta receptors that may be distinguished on the basis of their modulation of mu agonist actions (i.e., deltacomplexed and deltanoncomplexed receptors). DALCE appears to selectively interact with the deltanoncomplexed receptor.

IT 110881-59-9

RL: BIOL (Biological study)

(analgesia from brain administration of, delta-receptor subtypes in relation to)

- L28 ANSWER 44 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
- AN 1990:192185 HCAPLUS
- DN 112:192185
- TI Stress-induced tolerance to delta receptor agonist DPDPE and selectivity of the irreversible δ -ligand, DALCE
- AU Calcagnetti, Daniel J.; Bowen, Wayne D.; Holtzman, Stephen G.
- CS Sch. Med., Emory Univ., Atlanta, GA, 30322, USA
- SO Brain Research (1990), 509(2), 205-12 CODEN: BRREAP; ISSN: 0006-8993
- DT Journal
- LA English
- AB Expts. were conducted to provide further evidence of the selectivity of [D-Ala2,Leu5,Cys6]enkephalin (DALCE) as an antagonist of δ -receptor ligands and to use DALCE as a tool to explore the possible role of δ -receptors in restraint stress. Dose- and time-response curves were generated for the resp. δ and μ -selective opioid agonists

DPDPE $(3-30 \mu g)$ and DAGO $(0.03-0.3 \mu g)$ to increase the latency to paw-lick in the hot-plate test in rats. Both agonists produced robust analgesia lasting at least 20 min when injected intracerebroventricularly (i.c.v.). DALCE (0.4-10 μg) administered i.c.v. 24 h earlier failed to affect baseline pain sensitivity. DALCE pretreatment dose-dependently blocked the increase in paw-lick latency produced by DPDPE (30 µg) but not that induced by an equivalent analgesic dose of DAGO (0.3 μg). Whether 1 h of restraint stress would alter δ -receptor sensitivity as indexed by DPDPE-induced analgesia and attenuate the ability of DALCE to functionally antagonize DPDPE-induced analgesia were also determined Rats were assigned to 1 of 4 treatment groups: i.c.v. vehicle injection/no stress; vehicle/stress; i.c.v. DALCE (10 μg)/no stress; DALCE/stress. Twenty-four hours after treatment, dose- and time-response curves were generated to test the ability of DPDPE (30-120 µg) to increase paw-lick latency. Prior exposure to stress alone produced tolerance to DPDPE-induced analgesia. DALCE pretreatment antagonized DPDPE similarly regardless of stress condition. The effects of both stress and DALCE were surmounted by the highest dose of DPDPE. It is possible that DPDPE produced analysesia by acting at sites other than δ -receptors. Thus, DALCE is a selective δ -antagonist and stress can induce tolerance to the analgesic effect of DPDPE.

IT 110881-59-9

RL: BIOL (Biological study) (enkephalin analgesia inhibition by, δ -opioid receptors in)

- L28 ANSWER 45 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
- AN 1989:471272 HCAPLUS
- DN 111:71272
- TI [D-Ala2, Leu5, Cys6] enkephalin: short-term agonist effects and long-term antagonism at delta opioid receptors
- AU Calcagnetti, Daniel J.; Fanselow, Michael S.; Helmstetter, Fred J.; Bowen, Wayne D.
- CS Dep. Psychol., Dartmouth Coll., Hanover, NH, 03755, USA
- SO Peptides (New York, NY, United States) (1989), 10(2), 319-26 CODEN: PPTDD5; ISSN: 0196-9781
- DT Journal
- LA English
- The in vivo short-term effects (<35 min) and the in vivo long-term effects (>2 days) of the synthetic enkephalin analog, [D-Ala2, Leu5, Cys6] enkephalin (DALCE) were examined In the short term, DALCE produced analgesia and transient immobility after intracerebroventricular (ICV) administration. A dose-related increased was found in paw-lick latency for rats placed on a hotplate (52°). In the 2nd experiment, immobility was attenuated by pretreatment with naltrexone methobromide (QNTX, $0.1 \mu g$), and the δ selective antagonist, 16-Me cyprenorphine (M80, 5 μg), QNTX and M80 also attenuated DALCE-induced immobility by >50% of control. Paw-lick latency was then measured on the hotplate to assess analgesia. Pretreatment with M80 reliably attenuated the DALCE-induced analgesia. Whereas QNTX failed to reliably attenuate paw-latency on the 1st trial, it was as effective as M80 on the 2nd trial. Evidently, the short-term agonist effects of DALCE are produced by actions at μ and δ opioid receptors as would be predicted from prior in vitro studies showing moderate to high affinity, resp., at these receptors. In the 3rd experiment, DALCE displayed long-term behavioral antagonism that was selective for the δ receptor. Rats were injected ICV with 6.7 μg of DALCE and tested 48 h later. Analgesia was measured by injecting 15% formalin s.c. followed 20 min later by an ICV injection of 1 of 3 selective opioid agonists (DAGO, DPDPE, or U50488H). At the doses tested, these agonists produced an equivalent level of analgesia as indicated by reduction in formalin-induced behavior. DPDPE-induced analgesia was completely blocked

by pretreatment with DALCE but analgesia produced by DAGO and U50488H was not affected. In vivo DALCE apparently acts like a long-term (irreversible) antagonist selective for δ receptors. The 4th experiment tested DALCE's ability to reverse conditional fear-induced analgesia that has previously been shown to involve δ receptors. Rats received footshocks in an observation chamber and were injected ICV with DALCE (6.7 $\mu g)$ or saline either 24, 48, or 72 h prior to testing. DALCE was equally effective at increasing formalin-induced behavior in rats treated at each interval. DALCE's reversal of conditional analgesia 72 h after injection suggests that this peptide acts like an irreversible antagonist. The results support a role for δ receptor involvement in the expression of conditional analgesia.

IT 110881-59-9

RL: BIOL (Biological study)

(long- and short-term effects of, delta receptor mediation of)

- L28 ANSWER 46 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
- AN 1987:629550 HCAPLUS
- DN 107:229550
- TI Affinity labeling of δ -opiate receptors using [D-Ala2,Leu5,Cys6]enkephalin. Covalent attachment via thiol-disulfide exchange
- AU Bowen, Wayne D.; Hellewell, Susan B.; Kelemen, Mark; Huey, Roger; Stewart, Darryl
- CS Sect. Biochem., Brown Univ., Providence, RI, 02912, USA
- SO Journal of Biological Chemistry (1987), 262(28), 13434 CODEN: JBCHA3; ISSN: 0021-9258
- DT Journal
- LA English
- [D-Ala2, Leu5, Cys6] enkephalin (DALCE) is a synthetic enkephalin analog which contains a SH group. DALCE binds with high affinity to $\delta\text{-receptors},$ with moderate affinity to $\mu\text{-receptors},$ and with negligible affinity to κ -receptors. Pretreatment of rat brain membranes with DALCE resulted in concentration-dependent loss of δ -binding sites. Using 2 nM [3H][D-Pen2,D-Pen5]enkephalin (where Pen represents penicillamine) to label δ -sites, 50% loss of sites occurred at .apprx.3 µM DALCE. Loss of sites was not reversed by subsequent incubation in buffer containing 250 mM NaCl or 100 μM quanyl-5'-yl imidodiphosphate (Gpp(NH)p), conditions which cause dissociation of opiate agonists. By contrast, the enkephalin analogs [D-Ala2,D-Leu5]enkephalin, [D-Ser2,Leu5,Thr6]enkephalin, [D-Pen2,D-Pen5]enkephalin, and [D-Ala2,D-Leu5,Lys6]enkephalin were readily dissociated by NaCl and Gpp(NH)p, producing negligible loss at 3 μM . This suggests that DALCE binds covalently to the receptors. Pretreatment of membranes with the reducing agents dithiothreitol and β -mercaptoethanol had no effect on opiate binding. Thus, loss of sites required both specific recognition by opiate receptors and a thiol group. The irreversible effect of DALCE was completely selective for δ -receptors. Pretreatment with DALCE had no effect on binding of ligands to μ - or κ -receptors. The effect of DALCE on δ -binding was: (1) markedly attenuated by inclusion of dithiothreitol in the preincubation buffer, (2) partially reversed by subsequent incubation with dithiothreitol, (3) slightly enhanced when converted to the SS-linked dimer, and (4) prevented by blocking the DALCE SH group with N-ethylmaleimide or iodoacetamide. Thus, DALCE binds covalently to δ -receptors by forming a SS bond with a SH group in the binding site. The mechanism may involve a SH-SS exchange reaction. TΤ 110881-59-9

RL: BIOL (Biological study)

 $(\delta\text{-opioid receptors affinity labeling by, thiol-disulfide exchange reaction in)}$

- L28 ANSWER 47 OF 47 HCAPLUS COPYRIGHT 2004 ACS on STN
- AN 1987:569052 HCAPLUS
- DN 107:169052
- TI Characterization of D-Ala2, Leu5, Cys6-enkephalin: a novel synthetic opioid peptide with slowed dissociation from delta receptors
- AU Bowen, Wayne D.; Kelemen, Mark; Huey, Roger; Stewart, D.
- CS Sect. Biochem., Brown Univ., Providence, RI, 02912, USA
- SO NIDA Research Monograph (1986), 75 (Prog. Opioid Res.), 193-6 CODEN: MIDAD4; ISSN: 0361-8595
- DT Journal
- LA English
- AΒ [D-Ala2, Leu5, Cys6] enkephalin (DALCE) is a synthetic enkephalin analog which contains a reduced sulfhydryl group. It exhibited moderate δ selectivity (μ/δ median inhibitory concentration ratio, 13) in rat brain membrane prepns., but was not as selective as the disulfide-containing peptide, D-penicillamine2,5-enkephalin (DPDPE) (μ/δ ratio, 1121). However, unlike other δ -selective peptides, DALCE exhibited a markedly slowed dissociation from receptors after pretreatment of membranes with micromolar concns. Pretreatment of membranes with 10 μM DALCE, followed by extensive washing, produced an 85-90% loss of [3H]DPDPE binding sites. DADLE, [D-Ser2,Leu5,Thr6]enkephalin (DSTLE) and DPDPE produced losses of 59, 70, and 19%, resp. The effect of DALCE was not reversed by a 60 min postincubation in buffer containing 250 mM NaCl + 100 μM GMPPNP, a condition which produced nearly complete reversal of loss of sites by DADLE and DSTLE. DPDPE could be dissociated merely by postincubation in Tris-buffer alone for 15 min. The order for ease of dissociation after preincubation was DPDPE > DADLE > DSTLE >>> DALCE. The effect of DALCE was selective for δ sites, although higher concns. of DALCE produced loss of μ sites. DALCE pretreatment had no effect on recovery of κ sites. Apparently, DALCE binds essentially irreversibly to δ receptors.
- IT 110881-59-9
 - RL: PROC (Process)

(binding of, by δ -receptors of brain membrane, kinetics of)

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FILE COVERS 1907 - 21 Jun 2004 VOL 140 ISS 26
FILE LAST UPDATED: 20 Jun 2004 (20040620/ED)
 This file contains CAS Registry Numbers for easy and accurate
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     PCT Int. Appl., 176 pp.
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     The present invention concerns fusion of Fc domains with biol. active
AB
     peptides and a process for preparing pharmaceutical agents using biol. active
     peptides. In this invention, pharmacol. active compds. are prepared by a
     process comprising: a) selecting at least one peptide that modulates the
      activity of a protein of interest; and b) preparing a pharmacol. agent
      comprising an Fc domain covalently linked to at least one amino acid of
      the selected peptide. Linkage to the vehicle increases the half-life of
      the peptide, which otherwise would be quickly degraded in vivo. The
      preferred vehicle is an Fc domain. The peptide can be selected, for
      example, by phage display, E.coli display, ribosome display, RNA-peptide
      screening, yeast-based screening, chemical-peptide screening, rational
      design, or protein structural anal.
IT
      267881-98-1
      RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES
      (Uses)
          (Fc-domain-modified peptides as therapeutic agents)
     ANSWER 2 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
L38
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          W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,
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RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     US 2002193294
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     WO 1999-CA1029
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                                 19991103
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OS MARPAT 132:343357
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AB Peptides derived from the extracellular domains of claudins that can be used to increase or inhibit claudin-mediated cell adhesion in a variety of in vivo and in vitro contexts are provided. Within certain embodiments, the modulating agents may be used to increase blood/brain barrier permeability. The modulating agents comprise at least one claudin cell adhesion recognition sequence or an antibody or fragment thereof that specifically binds the claudin cell adhesion recognition sequence. Modulating agents may addnl. comprise one or more cell adhesion recognition sequences recognized by other adhesion mols. Such modulating agents may, but need not, be linked to a targeting agent, drug and/or support material. Representative peptides were found to alter the morphol. and growth habit of NRK cells in culture and to alter the elec. properties of monolayers of MDCK cells.

IT 267425-57-0 267425-63-8

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(claudin-derived peptide; peptides derived from claudins for modulation of cell adhesion and permeability barriers)

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L38 ANSWER 3 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
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AN 2000:291095 HCAPLUS

DN 132:329919

TI Modified peptides containing an antibody Fc domain as therapeutic agents

IN Feige, Ulrich; Liu, Chuan-fa; Cheetham, Janet; Boone, Thomas Charles

PA Amgen Inc., USA

SO PCT Int. Appl., 608 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 2

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		ΙE,	SI,	LT,	LV,	FI,	RO											
BR	9914		A 2002071			0716		BR 1999-14708					19991025 <					
JP	2003512011			T	2	20030402			JP 2000-578351 1999102							<		
AU	767725			B:	2	2003		Αl	AU 2000-12322 19991025 <									
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ZA	2001002753								\mathbf{z}_{i}	A 20	01-2	753		2001	0404	<		
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    US 2004077022
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PRAI US 1998-105371P
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    US 1999-428082
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    WO 1999-US25044
                      W
                           19991025 <--
    US 2000-563286
                      Α1
                           20000503
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- The present invention concerns fusion of Fc domains with biol. active peptides and a process for preparing pharmaceutical agents using biol. active peptides. In this invention, pharmacol. active compds. are prepared by a process comprising: (a) selecting at least one peptide that modulates the activity of a protein of interest; and (b) preparing a pharmacol. agent comprising an Fc domain covalently linked to at least one amino acid of the selected peptide. Linkage to the vehicle increases the half-life of the peptide, which otherwise would be quickly degraded in vivo. The preferred vehicle is an Fc domain. The peptide is preferably selected by phage display, Escherichia coli coli display, ribosome display, RNA-peptide screening, or chemical-peptide screening.
- TT 267881-98-1D, fusion protein with IgG1 Fc domain
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (vasoactive intestinal polypeptide mimetic; modified peptides containing an antibody Fc domain as therapeutic agents)
- L38 ANSWER 4 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
- AN 2000:44927 HCAPLUS
- DN 132:265477
- TI Inhibitory specificity spectrum of peptide α -amylase inhibitors designed by limited combinatorial libraries
- AU Doleckova, L.; Pavlik, M.; Mares, M.; Kluh, I.
- CS Institute of Organic Chemistry and Biochemistry, Academy of Sciences of the Czech Republic, Prague, Czech Rep.
- Innovation and Perspectives in Solid Phase Synthesis & Combinatorial Libraries: Peptides, Proteins and Nucleic Acids--Small Molecule Organic Chemical Diversity, Collected Papers, International Symposium, 5th, London, Sept. 2-6, 1997 (1999), Meeting Date 1997, 277-278.

 Editor(s): Epton, Roger. Publisher: Mayflower Scientific Ltd., Kingswinford, UK.

 CODEN: 680EAA
- DT Conference
- LA English
- AB A symposium on the authors' use of combinatorial library techniques in synthesizing α -amylase-inhibiting low-mol. weight mimetic peptides.
- IT 263398-25-0P 263398-30-7P 263398-31-8P
 - RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(inhibitory specificity spectrum of peptide α -amylase inhibitors designed by limited combinatorial libraries)

- RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L38 ANSWER 5 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
- AN 1999:492100 HCAPLUS
- DN 131:252885
- TI Discovery of novel peptidic dopamine transporter ligands by screening a positional scanning combinatorial hexapeptide library
- AU Rothman, Richard B.; Baumann, Michael H.; Dersch, Christina M.; Appel, Jon; Houghten, Richard A.

- CS Clinical Psychopharmacology Section, DIR, NIDA, NIH, Baltimore, MD, 21224, USA
- SO Synapse (New York) (1999), 33(3), 239-246 CODEN: SYNAET; ISSN: 0887-4476
- PB Wiley-Liss, Inc.
- DT Journal
- LA English
- AΒ The acute reinforcing effects of cocaine are thought by some to result from cocaine binding to the dopamine (DA) transporter, which inhibits DA uptake and increases synaptic DA levels in the mesolimbic system. Other data suggest that neurotransmitters other than DA contribute to cocaine reinforcement and addiction. These considerations illustrate the need to have addnl. research tools with which to test the "DA hypothesis.". strategy is to identify drugs which bind to the DA transporter (DAT ligands) but which do not inhibit DA uptake as effectively as cocaine. The purpose of the present study was to identify members of a novel structural class of DAT ligands and to characterize their interactions at the DA transporter. A positional scanning hexapeptide D-amino acid library was screened for inhibition of [1251]RTI-55 binding to rat caudate DA transporters. Based on the results, 12 peptides were synthesized. All 12 peptides inhibited [1251]RTI-55 binding to DA transporters with IC50 values, which ranged from 1.8 μM to 12 μM. The two most potent peptides (TPI-669-1 and TPI-669-4) were prepared in larger quantities and were characterized further for activity at the DAT and 5-HT transporter. Both peptides inhibited DA and 5-HT uptake and transporter binding with IC50/Ki values in the low micromolar range. In vivo microdialysis studies demonstrated that both peptides increase extracellular DA and 5-HT in the nucleus accumbens of rats. These data demonstrate that peptides can function as inhibitors of biogenic amine transport. Future work will focus on developing more potent and selective peptides.
- IT 245044-92-2 245072-62-2, TPI 669-4

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(peptidic dopamine transporter ligands from combinatorial hexapeptide library screening)

RE.CNT 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L38 ANSWER 6 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
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AN 1999:350685 HCAPLUS

DN 131:19306

- TI Preparation of cyclic peptides having VLA-4 (very late antigen-4) adhesion inhibitory activity and medicinal use thereof
- IN Takahashi, Toshiya; Saito, Nobuo; Takeshige, Hideyuki; Tanaka, Toshiaki; Kainoh, Mie
- PA Toray Industries, Inc., Japan
- SO PCT Int. Appl., 75 pp. CODEN: PIXXD2

DT Patent

LA Japanese

FAN. CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE ______ WO 9925731 A1 19990527 WO 1998-JP5096 19981112 <--W: CA, JP, US RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, EP 970965 20000112 EP 1998-953029 19981112 <--Α1 R: DE, FR, GB, IT

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US 6511961 B1 20030128 US 1999-341435 19990709 <--
PRAI JP 1997-311692 A 19971113 <--
WO 1998-JP5096 W 19981112 <--
OS MARPAT 131:19306
GI
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R^1-NH-A-B-C-D-E-F-CO_2R^2 I
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Claimed are cyclic peptides represented by general formula [I; A, F = L-AB or D-Cys, -homo-Cys, -Pen, or -MprI, Asp, Glu, Aad, Dpr, Dab, Orn; B = Lor D-Ala, -Ala(t-Bu), -Val, -Leu, -Ile, -aIle, -Abu, -Nle, -Nva, -Tle, -Cha, -Chg, -Phe, -Phg, -Trp-, -Ala(3-Bzt), -Ala(1-Naph), -Ala(2-Naph), -Ala(2-Pyr), -Ala(2-Qui), -His,-Thi, -Ala(4-Thz), -2-Abz, -Pro, -homo-Pro, or -Tic; C = Asp analog, Glu analog, Aad analog, Asn analog, Gln analog, Ser, Ser(OMe), homo-Ser, Dpr, Dab, Orn, Met, Met(O), Met(O2), alle, Nle, Nva, Chg, Phg, Tyr, Tle, etc.; D = L- or D-Tyr, -Ser, -homo-Ser, -Leu, -Ile, -aIle, -Nle, -Nva, -Chg, -Cha, -Val, Ala(t-Bu), -Abu, -Tle, -Ala, -Phg, -homo-Phe, -Phe, -Ala(2-Naph), -Ala(2-Pyr), -Ala(3-Bzt), Ala(1-Naph), -Ala(2-Qui), -Thi, -Ala(4-Thz), -2-Abz, -Trp, or -His; G = disulfide or amide bond; R1 = H, acyl; R2 = H, C1-6 linear or branched alkyl] and the use thereof as remedies for inflammations, in particular allergic inflammations or hepatitis. These peptides are useful for the treatment of inflammatory diseases, e.g. allergic inflammations such as bronchial asthma, atopic dermatitis, and allergic rhinitis, hepatitis, nephritis, chronic arthrorheumatism, autoimmune diseases, rejection after organ transplant, type-1 diabetes, Crohn's disease, reinfarction after surgery, and arteriosclerosis. H-Cys-Chg-Asp-His-Leu-Cys-OH (cyclic disulfide) in vitro inhibited the binding of VLA-4-IgG chimera protein to immobilized CS-1 peptide (H-Cys-Leu-His-Gly-Pro-Glu-Ile-Leu-Asp-Val-Pro-Ser-Thr-OH) with IC50 of 120 nM. H-Cys-Ile-Met(O)-His-Leu-Cys-OH (cyclic disulfide) in vivo inhibited the increase in serum level of aspartic acid aminotransferase (AST) and that of alanine aminotransferase (ALT) in mouse having concanavalin-induced hepatitis by 27.0 and 38.7% at 100 µg/kg, resp.

IT 226566-85-4P 226567-60-8P 226567-69-7P 226568-05-4P 226568-08-7P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of cyclic peptides having VLA-4 (very late antigen-4) adhesion inhibitory activity for treatment of allergic inflammations and hepatitis)

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L38 ANSWER 7 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
- AN 1998:771963 HCAPLUS
- DN 130:135821
- TI Structural Basis for Inhibition of the Protein Tyrosine Phosphatase 1B by Phosphotyrosine Peptide Mimetics
- AU Groves, Matthew R.; Yao, Zhu-Jun; Roller, Peter P.; Burke, Terrence R., Jr.; Barford, David
- CS Laboratory of Molecular Biophysics Department of Biochemistry, University of Oxford, Oxford, OX1 3QU, UK
- SO Biochemistry (1998), 37(51), 17773-17783

CODEN: BICHAW; ISSN: 0006-2960

- PB American Chemical Society
- DT Journal
- LA English
- Protein tyrosine phosphatases regulate diverse cellular processes and ABrepresent important targets for therapeutic intervention in a number of diseases. The crystal structures of protein tyrosine phosphatase 1B (PTP1B) in complex with small mol. inhibitors based upon two classes of phosphotyrosine mimetics, the (difluoronaphthylmethyl)phosphonic acids and the fluoromalonyl tyrosines, have been determined to resolns. greater than 2.3 Å. The fluoromalonyl tyrosine residue was incorporated within a cyclic hexapeptide modeled on an autophosphorylation site of the epidermal growth factor receptor. The structure of this inhibitor bound to PTP1B represents the first crystal structure of a non-phosphonate-containing inhibitor and reveals the mechanism of phosphotyrosine mimicry by the fluoromalonyl tyrosine residue and the nature of its interactions within the catalytic site of PTP1B. In contrast to complexes of PTP1B with phosphotyrosine-containing peptides, binding of the fluoromalonyl tyrosine residue to the catalytic site of PTP1B is not accompanied by closure of the catalytic site WPD loop. Structures of PTP1B in complex with the (difluoronaphthylmethyl)phosphonic acid derivs. reveal that substitutions of the naphthalene ring modulate the mode of inhibitor binding to the catalytic site and provide the potential for enhanced inhibitor affinity and the generation of PTP-specific inhibitors. These results provide a framework for the rational design of higher affinity and more specific phosphotyrosine mimetic inhibitors of not only protein tyrosine phosphatases but also SH2 and PTB domains.
- IT 214774-75-1

RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)

(structural basis for inhibition of protein tyrosine phosphatase 1B by phosphotyrosine peptide mimetics)

- RE.CNT 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L38 ANSWER 8 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
- AN 1998:606884 HCAPLUS
- DN 129:310859
- TI Potent inhibition of protein-tyrosine phosphatase-1B using the phosphotyrosyl mimetic fluoro-O-malonyl tyrosine (FOMT)
- AU Roller, Peter P.; Wu, Li; Zhang, Zhong-Yin; Burke, Terrence R., Jr.
- CS Laboratory of Medicinal Chemistry, Division of Basic Sciences, National Cancer Institute, Bethesda, MD, 20892, USA
- SO Bioorganic & Medicinal Chemistry Letters (1998), 8(16), 2149-2150
 - CODEN: BMCLE8; ISSN: 0960-894X
- PB Elsevier Science Ltd.
- DT Journal
- LA English
- AB To enhance protein-tyrosine phosphatase (PTP)-1B binding interactions, both inside and outside the pTyr binding pocket, a thioether-cyclized peptide has been designed based on the EGF receptor autophosphorylation sequence (EGFR988-993) "Asp-Ala-Asp-Glu-pTyr-Leu", in which the pTyr residue has been replaced by the nonphosphorus-containing pTyr mimetic fluoro-O-malonyltyrosine (FOMT). The resulting peptide exhibits a Ki value of 170 nM, making it one of the most potent inhibitors of PTP 1B yet reported.
- IT **214774-75-1**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(potent inhibition of protein-tyrosine phosphatase-1B using cyclized peptide containing phosphotyrosyl mimetic fluoromalonyl tyrosine (FOMT))
RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L38 ANSWER 9 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
ΑN
     1997:717940 HCAPLUS
DN
     127:331756
     Conjugates of lipophilic moieties and fragments of vasoactive intestinal
TI
     peptide (vip)
IN
     Gozes, Ilana; Fridkin, Matityahu
     Yeda Research and Development Co. Ltd., Israel; Ramot University Authority
PΑ
     for Applied Research and Industrial DevelopmentLt; Gozes, Ilana; Fridkin,
     Matityahu
     PCT Int. Appl., 76 pp.
SO
     CODEN: PIXXD2
     Patent
DТ
     English
LA
FAN.CNT 1
     PATENT NO.
                    KIND DATE
                                         APPLICATION NO. DATE
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PRAI IL 1996-118003
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OS
     MARPAT 127:331756
     Novel conjugates of peptides having 3-12 amino acid residues and
AΒ
     lipophilic moieties, which may be present at the N- or C- terminal of the
     peptides, have been prepared for the treatment of male impotence or
     neurodegenerative diseases. Thus, peptide conjugate St-Lys-Lys-Tyr-Leu-
     NH2 (St = stearoyl) was prepared and assayed for neuronal survival (80-110%
     at 10-3-10-9 M).
     197908-00-2P
IT
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
     BIOL (Biological study); PREP (Preparation); USES (Uses)
        (conjugates of lipophilic moieties and fragments of vasoactive
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L38 ANSWER 10 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1997:281127 HCAPLUS

intestinal peptide)

DN 126:260618

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TT
     Cyclic peptide mimics of RGD-binding sites and their use in inhibiting
     integrin-mediated cell attachment
IN
     Ruoslahti, Erkki; Pasqualini, Renata
PΑ
     La Jolla Cancer Research Foundation, USA
SO
     PCT Int. Appl., 57 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 1
     PATENT NO.
                     KIND DATE
                                        APPLICATION NO. DATE
     ______
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                                         ______
     WO 9708203
                           19970306
                                          WO 1996-US14058 19960826 <--
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        RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
     US 5817750
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                                                          19960826 <--
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     WO 1996-US14058
os
     MARPAT 126:260618
AΒ
     The present invention provides cyclic peptides that recognize the
     arginine-glycine-aspartic acid (RGD) motif characteristics of many
     integrin ligands. These cyclic RGD-binding peptides, which comprise the
     motif (W/P)DD(G/L)(W/L)(W/L/M), have a structure that functionally mimics
     the RGD-binging site on an integrin. The invention further provides an
     antibody selectively reactive with a cyclic RGD-binding peptide containing the
     sequence (W/P)DD(G/L)(W/L)(W/L/M). The invention also provides a method
     to reduce or inhibit cell attachment to an RGD-containing ligand using a
     cyclic RGD-binding peptide of the invention. Phage display libraries were
     screened with fibronectin fragments to identify peptides with affinity for
     RGD-containing peptides. In a cell attachment assay, two of these (cyclized)
     peptides inhibited osteosarcoma cell line MG-63 binding to fibronectin and
     vitronectin. The identified RGD-binding peptides were shown to resemble a
     peptide from the \beta3 integrin subunit.
IT
     188740-36-5P
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); SPN (Synthetic preparation); BIOL (Biological
     study); PREP (Preparation)
        (cyclic peptide mimics of RGD-binding sites and their use in inhibiting
        integrin-mediated cell attachment)
L38
    ANSWER 11 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
AN
     1997:226489 HCAPLUS
DN
     126:199821
TI
     Synthesis and Application of Unprotected Cyclic Peptides as Building
     Blocks for Peptide Dendrimers
     Zhang, Lianshan; Tam, James P.
ΑU
     Department of Microbiology and Immunology, Vanderbilt University,
CS
     Nashville, TN, 37232-2363, USA
     Journal of the American Chemical Society (1997), 119(10),
SO
     2363-2370
     CODEN: JACSAT; ISSN: 0002-7863
PΒ
     American Chemical Society
DT
     Journal
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OS CASREACT 126:199821

AB The authors describe an efficient regiospecific method for cyclization of unprotected peptide segments based on intramol. transthioesterification of unprotected cysteinyl peptide thioesters under the control of ring-chain tautomeric equilibrium in aqueous buffered solns. at pH 5-7.5. The initial

English

LA

cyclization to form an intramol. thioester under the ring-chain tautomeric equilibrium is reversible and could be performed in relatively high concns. without observable oligomerization. This method overcomes the limitation of conventional cyclization methods that require high dilns. The reaction becomes irreversible by a subsequent, spontaneous proximity-driven S- to N-acyl transfer to the adjacent N α -amine of Cys to form an end-to-end cyclic peptide. The cyclization is regionselective. No side reactions were observed with side-chain functionalities such as the N ϵ -amine of Lys, thiol of internal Cys, or imidazole of His. Since a free thiol group was introduced to the product after cyclization, these cyclic peptides were exploited as building blocks for synthesizing peptides with unusual architectures such as bicyclic peptides containing end-to-end backbones and disulfide bridges as well as cascade branched peptide dendrimers.

IT 187803-73-2P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation and application of unprotected cyclic peptides as building blocks for peptide dendrimers)

- L38 ANSWER 12 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
- AN 1997:123455 HCAPLUS
- DN 126:220303
- TI Potent inhibition of protein-tyrosine phosphatase by phosphotyrosine-mimic containing cyclic peptides
- AU Akamatsu, Miki; Roller, Peter P.; Chen, Li; Zhang, Zhong-Yin; Ye, Bin; Burke, Terrence R., Jr.
- CS Laboratory of Medicinal Chemistry, Division of Basic Sciences, National Cancer Institute, National Institutes of Health, Bethesda, MD, 20892, USA
- SO Bioorganic & Medicinal Chemistry (1997), 5(1), 157-163 CODEN: BMECEP; ISSN: 0968-0896
- PB Elsevier
- DT Journal
- LA English
- In an effort to derive potent and bioavailable protein-tyrosine AΒ phosphatase inhibitors, we have previously reported hexameric peptides based on the epidermal growth factor receptor sequence EGFR988-993 (Asp-Ala-Asp-Glu-Xxx-Leu, where Xxx = Tyr), in which the tyrosyl residue has been replaced by the non-hydrolyzable phosphotyrosyl mimics phosphonomethylphenylalanine (Pmp), difluorophosphonomethylphenylalanine (F2Pmp), and O-malonyltyrosine (OMT). Inhibitory potencies (IC50 values) of these peptides against the tyrosine phosphatase PTP 1B were 200, 0.2 and 10 µM, resp. Since cellular penetration of peptides containing highly charged phosphonate residues is compromised, and good bioreversible protection strategies for the F2Pmp residue have not yet been reported, the OMT residue is of particular interest in that it affords potential new prodrug approaches. In the current study we have prepared cyclized versions of the OMT-containing EGFR988-993 peptide in order to increase its proteolytic stability and restrain conformational flexibility. Three different cyclic analogs were synthesized. Two of these were cyclized through the peptide backbone ("head to tail") using in one case a single glycine spacer (heptamer peptide) and in the second instance, two glycines (octamer peptide). In a PTP1-based assay the cyclic heptamer experienced a two-fold loss of potency (Ki = 25.2 \pm 3.9 μ M) relative to the linear hexamer parent (Ki = 13 \pm 0.9 μ M), while the cyclic octamer demonstrated a five-fold increase in potency ($Ki = 2.60 \pm 0.11 \mu M$). The third peptide was cyclized by means of a sulfide bridge between the side chain of a C-terminally added cysteine residue and the β -carbon of a N-terminal acetyl residue. Although the overall size of this ring was identical to that exhibited by the preceding backbone-cyclized octamer, it displayed a three-fold enhancement in potency ($Ki = 0.73 \pm$

 $0.03~\mu M)\,.$ The structural basis for the observed results are discussed. Conformational restrictions induced by cyclization could aid in defining geometries for peptidomimetic design. Finally, it can be speculated that cyclization of other linear PTP-inhibitory peptides, such as the F2Pmp-containing hexamer, may also increase their potency.

IT 188398-12-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and inhibition of protein-tyrosine phosphatase by phosphotyrosine-mimic containing cyclic peptides)

- RE.CNT 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L38 ANSWER 13 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
- AN 1997:117658 HCAPLUS
- DN 126:141909
- TI Group of peptides that act synergistically with hydrophobic antibiotics against gram-negative enteric bacteria. [Erratum to document cited in CA125:163069]
- AU Vaara, Martti; Porro, Massimo
- CS Dep. Bacteriology Immunology, Univ. Helsinki, Helsinki, 00014, Finland
- SO Antimicrobial Agents and Chemotherapy (1997), 41(2), 496 CODEN: AMACCQ; ISSN: 0066-4804
- PB American Society for Microbiology
- DT Journal
- LA English
- AB The synthetic peptide KFFKFFKFF should read KFFKFFKFFK, and IKFLKFLKFL should read OKFLKFLKFLK. The index entries were corrected
- IT 180205-58-7

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(synthetic cationic peptides that act synergistically with hydrophobic antimicrobials against gram-neg. enteric bacteria (Erratum))

- L38 ANSWER 14 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
- AN 1996:607995 HCAPLUS
- DN 125:317948
- TI Reversible affinity labeling of opioid receptors via disulfide bonding: discriminative labeling of μ and δ subtypes by chemically activated thiol-containing enkephalin analogs
- AU Yasunaga, Teruo; Motoyama, Shihoko; Nose, Takeru; Kodama, Hiroaki; Kondo, Michio; Shimohigashi, Yasuyuki
- CS Manuf. Process Dev. Div., Otsuka Pharm. Co., Ltd., Saga Factory, Saga, 842-01, Japan
- SO Journal of Biochemistry (Tokyo) (1996), 120(2), 459-465 CODEN: JOBIAO; ISSN: 0021-924X
- PB Japanese Biochemical Society
- DT Journal
- LA English
- AB The 3-nitro-2-pyridinesulfenyl (Npys) group bound to a mercapto group is a highly activated electrophilic reagent, which only reacts with a free mercapto group to form a disulfide bond via the thiol-disulfide exchange reaction. The authors incorporated the Npys group into enkephalin analogs to affinity label μ and δ opioid receptors. When rat brain membranes were incubated with [D-Ala2, Leu(CH2SNpys)5]enkephalin, and assayed for the inhibition of binding of DAGO and DSLET enkephalin analogs to opioid receptors, the number of receptors decreased sharply, depending upon the concentration of this SNpys-containing enkephalin. It was found that this

enkephalin analog occupies μ receptors highly specifically (EC50 = 51 nM) and almost 100 times more selectively than δ receptors. In contrast, [D-Ala2,Leu5]enkephalyl-Cys(Npys)6 attached covalently to δ receptors (E50 = 34 nM) about 150 times more selectively than to μ receptors. Although N-ethylmaleimide also inhibited the binding of DAGO and DSLET, four to six orders of magnitude higher concns. were required as compared to SNpys-containing enkephalins. When enkephalin-bound rat membranes were treated with dithiothreitol, the loss of receptors was reversed, depending upon the concentration of and incubation time with dithiothreitol. The recovery was much faster (about 1000 times) for δ receptors than for μ receptors. The present results indicated that both μ and δ receptors in rat brain consist of a free mercapto group near the enkephalin binding site and that SNpys-containing enkephalins can label these mercapto groups discriminatively. The disulfide bond between [D-Ala2,Leu5]enkephalyl-Cys6 and δ receptors appears to be exposed, while that between [D-Ala2,Leu(CH2-SNpys)5]enkephalin and μ receptors is shielded.

IT 120866-05-9P

RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (reversible affinity labeling of μ and δ opioid receptor subtypes via disulfide bonding with chemical activated thiol-containing enkephalin analogs)

IT 183144-38-9P 183144-39-0P 183144-40-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(reversible affinity labeling of μ and δ opioid receptor subtypes via disulfide bonding with chemical activated thiol-containing enkephalin analogs)

- L38 ANSWER 15 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
- AN 1996:469899 HCAPLUS
- DN 125:163069
- TI Group of peptides that act synergistically with hydrophobic antibiotics against gram-negative enteric bacteria
- AU Vaara, Martti; Porro, Massimo
- CS Dep. Bacteriology Immunology, Univ. Helsinki, Helsinki, 00014, Finland
- SO Antimicrobial Agents and Chemotherapy (1996), 40(8), 1801-1805 CODEN: AMACCQ; ISSN: 0066-4804
- PB American Society for Microbiology
- DT Journal
- LA English
- AB A synthetic peptide, KFFKFFKFF, consisting of cationic lysine residues and hydrophobic phenylalanine residues was found to sensitize gram-neg. bacteria to hydrophobic and amphipathic antibiotics. At a concentration of 3 $\mu g/mL$, it decreased the MIC of rifampin for smooth, encapsulated Escherichia coli by a factor of 300. Other susceptible bacterial species included Enterobacter cloacae, Klebsiella pneumoniae, and Salmonella typhimurium, but Pseudomonas aeruginosa was resistant. Similar results were obtained with another synthetic peptide, IKFLKFLKFL. The fractional inhibitory concentration indexes for the synergism of these peptides with rifampin, erythromycin, fusidic acid, and novobiocin were very close to those determined for the previously characterized potent outer-membranedisorganizing agents polymyxin B nonapeptide and deacylpolymyxin B. KFFKFFKFF had direct activity against the gram-pos. organism Micrococcus strain ML36, was strongly hemolytic, and was as active on polymyxin-resistant E. coli mutants as on their parent. These three attributes made KFFKFFKFF different from polymyxin derivs. and similar to cationic detergents, such as cetylpyridinium chloride. However, whereas the MIC of cetylpyridinium chloride for E. coli is low (0.5 to 4

 $\mu g/mL)$, that of KFFKFFKFF is much higher (30 to 100 $\mu g/mL)$. Other groups of synthetic peptides studied included polymyxin-like peptides with an intrachain disulfide bridge. Their synergism with antibiotics was less marked. Still other peptides, including KEKEKEKE and KKKKKKFLFL, lacked any synergism with the probe antibiotics.

IT 180205-58-7

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(synthetic cationic peptides that act synergistically with hydrophobic antimicrobials against gram-neg. enteric bacteria)

- L38 ANSWER 16 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
- AN 1996:285986 HCAPLUS
- DN 125:1563
- TI The recovery of affinity-labeled opioid receptors to their intact forms
- AU Yasunaga, Teruo; Motoyama, Shihoko; Shimohigashi, Yasuyuki; Kondo, Michio; Ohno, Motonori
- CS Manufacturing Process Development Division, Otsuka Pharmaceutical Co., Ltd., Kanzaki, 842-01, Japan
- SO Peptide Chemistry (1996), Volume Date 1995, 33rd, 273-276 CODEN: PECHDP; ISSN: 0388-3698
- PB Protein Research Foundation
- DT Journal
- LA English
- AB Enkephalin analogs, containing an Npys-activated mercapto group affinity-labeled the thiol of opioid receptors presumably by thiol-disulfide exchange reaction (Npys = 3-nitro-2-pyridinesulfenyl). To demonstrate such a putative disulfide bonding in affinity-labeling, the effect of dithiothreitol (DTT) was examined DTT-treatment after affinity-labeling increased the number of open receptors. The results indicated that Npys-enkephalins bind to the receptors via disulfide bonding.
- IT 120866-05-9

RL: BPR (Biological process); BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); PROC (Process); USES (Uses)

(Npys-containing enkephalin analogs affinity-labeling of opioid receptors)

- L38 ANSWER 17 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
- AN 1996:207549 HCAPLUS
- DN 124:279362
- TI Inhibition of angiotensin converting enzyme and potentiation of bradykinin by retro-inverso analogs of short peptides and sequences related to angiotensin I and bradykinin
- AU Carmona, Adriana K.; Juliano, Luiz
- CS Dep. Biophysics, Escola Paulista Medicina, Sao Paulo, Brazil
- SO Biochemical Pharmacology (1996), 51(8), 1051-60 CODEN: BCPCA6; ISSN: 0006-2952
- PB Elsevier
- DT Journal
- LA English
- AB There is pharmacol. evidence indicating that, in addition to the inhibition of angiotensin converting enzyme (ACE; EC 3.4.15.1), the potentiation of bradykinin (BK) responses may also involve the BK receptor or some binding site in the structures involved in the contractile response to this peptide. Dipeptides such as Val-Trp and some of its analogs as well as tripeptide homologs, including total and partial retro-inverso peptides, were synthesized and assayed for their ability to inhibit purified guinea pig plasma ACE and to potentiate the action of BK on the isolated ileum of

the same species. The peptides containing the P2-P1, P1-P'1, and P'1-P'2 inverted amide bonds inhibited ACE, were resistant to hydrolysis, and, depending on the amino acid composition, some of them potentiated the contractile response to BK while others did not. Des-[Arg1]-BK, which has an intrinsic activity at concns. higher than 10-5M, and the very dissimilar angiotensin I (AI) analog [Cys5-Cys10]-angiotensin-I-(5-10)-amide, which has no detectable contractile activity, were able to inhibit ACE and potentiate BK. In contrast to these peptides, BPP5a and BPP9a from Bothrops jararaca venom, and potentiators B and C from Agkistrodon halys blomhoffi venom were more effective as BK potentiators than as ACE inhibitors. In conclusion, the authors have synthesized and assayed compds. that preferentially inhibit ACE, e.g. retro-inverso tripeptides, or potentiate the response of smooth muscle to BK, e.g. snake venom peptides.

PRI: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study) (angiotensin converting enzyme inhibition and bradykinin potentiation by angiotensin I and bradykinin short peptide retro-inverso analogs)

- L38 ANSWER 18 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
- AN 1995:910956 HCAPLUS
- DN 124:741
- TI Screening of cyclic peptide phage libraries identifies ligands that bind streptavidin with high affinities
- AU Giebel, Lutz B.; Cass, Robert; Milligan, Daniel L.; Young, Dennis; Arze, Rafael; Johnson, Charles
- CS Department of Cytokine Biology, Arris Pharmaceutical Corporation, South San Francisco, CA, 94080, USA
- SO Biochemistry (1995), 34(47), 15430-5 CODEN: BICHAW; ISSN: 0006-2960
- PB American Chemical Society
- DT Journal
- LA English
- The screening of combinatorial peptide libraries has emerged as an AΒ important tool in the discovery of novel substrates or ligands for enzyme and receptor targets. For example, screening linear peptide libraries using streptavidin as a model receptor system has previously identified many low-affinity peptide ligands, all of which contain the common motif His-Pro-Gln (HPQ). We reasoned that constraining the conformational freedom of linear peptides by cyclization in a library would yield peptide ligands of increased affinity. Three different cyclic peptide libraries were constructed in an M13 phage display system as N-terminal pIII protein fusions. The random peptide sequences were flanked by two cysteine residues, which allows efficient disulfide bond formation and cyclization during phage assembly. These cyclic peptide libraries were screened with streptavidin as the model receptor system. Many sequences, all of which contained the motif His-Pro-Gln (HPQ), were discovered, and in the preceding paper, the structures of complexes of streptavidin-bound cyclic and linear peptides are described (Katz, 1995). Anal. of binding kinetics and affinities demonstrated that the conformationally constrained cyclic peptides bound streptavidin with affinities up to 3 orders of magnitude higher than linear peptides identified in previous library screens. These results demonstrate the potential of screening conformationally constrained peptide libraries for high-affinity novel receptor ligands or enzyme substrates.
- IT 171116-15-7

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(screening of cyclic peptide phage libraries for identification of

substrates or ligands for enzyme and receptor targets)

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L38 ANSWER 19 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
AN
    1995:789404 HCAPLUS
DN
    123:333284
    Novel integrin-binding peptides and their analytical and therapeutic uses
TΙ
    in the control of cellular adhesion
IN
    Ruoslahti, Erkki; Koivunen, Erkki
PΑ
    La Jolla Cancer Research Foundation, USA
SO
    PCT Int. Appl., 85 pp.
    CODEN: PIXXD2
DT
    Patent
    English
LA
FAN.CNT 2
                                        APPLICATION NO. DATE
    PATENT NO. KIND DATE
    WO 9514714 A1 19950601 WO 1994-US13542 19941122 <--
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            SK, TJ, TT, UA, UZ, VN
        RW: KE, MW, SD, SZ, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU,
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US 1994-286861 A
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                           19931124
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                          19941122 <--
    MARPAT 123:333284
    Novel integrin-binding peptides that bind to \alpha v- or \alpha 5-containing
    integrins and can exhibit high binding affinity. They contain one of the
     following sequence motifs: RX1ETX2WX3 (especially RRETAWA); RGDGX in which Xn
is
    an amino acid with a hydrophobic, aromatic side chain; the double cyclic
    CX1CRGDCX2C; and RLD. The peptides generally exhibit their highest
    binding affinity when they assume a conformationally stabilized
    configuration, e.g. by cyclization through disulfide bonds. These
    peptides may be used as affinity labels for purification and anal. of
    integrins, e.g. in the testing of the efficacy of integrin-binding
    pharmaceuticals such as antithrombotics. These peptides may also be
    useful as substrates for attachment of integrin-bearing cells to surfaces
    such as prosthetic devices or in preventing the unwanted binding of cells
    to a target, such as the binding of osteoclasts to bone in the treatment
    of of osteoporosis; the inhibition of angiogenesis, and as tumor
    inhibitors. Integrin-binding peptides were obtained by affinity purification
    of a phage display library containing random sequences in the display cassette
    by panning with integrins. Peptides specific for several different
    classes of integrin were obtained.
    168179-40-6
IT
    RL: BAC (Biological activity or effector, except adverse); BSU (Biological
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study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (binding to $\alpha v \beta 5$ integrin of; novel integrin-binding

(binding to $\alpha v \beta 5$ integrin of; novel integrin-binding peptides and their anal. and therapeutic uses in control of cellular

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adhesion)
IT
     168178-20-9 168178-29-8
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (binding to \alpha 5\beta 1 integrin of; novel integrin-binding
       peptides and their anal. and therapeutic uses in control of cellular
        adhesion)
    ANSWER 20 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
L38
AN
     1995:478310 HCAPLUS
DN
     122:256395
     Cyclic RGD and KGD peptides for treating thrombosis
TΤ
IN
     Pierschbacher, Michael D.; Cheng, Soan; Craig, William S.; Tschopp, Juerg
     La Jolla Cancer Research Foundation, USA
PΑ
SO
     PCT Int. Appl., 114 pp.
     CODEN: PIXXD2
DT
     Patent
     English
LA
FAN.CNT 2
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                    KIND DATE
                                         APPLICATION NO. DATE
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     US 1994-246852
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     WO 1994-US6913
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                           19940617
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OS
     MARPAT 122:256395
AΒ
     Cyclic RGD and KGD peptides, synthesized by methods well-known in the art,
     inhibit platelet aggregation without causing prolonged bleeding time.
     Typically these peptides contain hydrophobic amino acids adjacent to the
     carboxy terminus of the RGD or KGD sequence. Peptides of the invention
     can also contain in addition to the hydrophobic amino acid an adjacent pos.
     charged amino acid. These peptides have a high affinity for the receptor
     IIb/IIIa and a low affinity for the fibronectin and vitronectin receptors.
     The peptides can be administered in a suitable physiol. acceptable carrier
     to therapeutically treat thrombosis.
     161790-78-9P 162096-99-3P 162097-00-9P
     162097-03-2P 162097-05-4P 162097-06-5P
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Searched by Noble Jarrell 272-2556

162097-07-6P 162097-08-7P 162097-09-8P

162097-13-4P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (cyclic RGD and KGD peptides for treating thrombosis)

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L38 ANSWER 21 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
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AN 1995:267032 HCAPLUS

DN 122:56587

- TI Preparation of pentapeptides with affinity to opioid receptors.
- IN Fhoelenhag, Karin Ingeborg; Fryklund, Linda; Larsson, Bo Christer; Nyberg, Fred Jarl; Westin-Sjoedahl, Gertrud Elisabeth; Lundin, Ronny
- PA Kabi Pharmacia AB, Swed.
- SO PCT Int. Appl., 24 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

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PRAI		SE 1992-3496					1992			-									
	WO	1993-SE986			W		1993	1118	<	_									

Linear or cyclic pentapeptides with opioid receptor affinity having the sequence Tyr-X-Phe-Leu-Z (X, Z = amino acid residues or analogs; X and Z can be covalently coupled; when the peptide is linear, X = Ser, Gly, Pro, AMCA, D-Ala; Z = Glu, Gln; when the peptide is cyclic, X = D- or L-2,4-diaminobutyric acid, D- or L-Lys, D- or L-Orn, and D- or L-Cys; Z = Glu, Gln; with provisos), and derivs. thereof, were prepared Thus, H-Tyr-Ser-Phe-Leu-Glu-NH2, prepared by solid phase synthesis using BOC-protected amino acids on methylbenzhydrylamine resin, blocked 3H-labeled dihydromorphine in synaptic rat plasma membranes with Ki = 0.82 nM.

IT 159968-81-7P 159968-82-8P

MARPAT 122:56587

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of pentapeptides with affinity to opioid receptors)

L38 ANSWER 22 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1995:66703 HCAPLUS

DN 122:204537

TI Design and synthesis of novel cyclic RGD peptides as highly potent and

selective GPIIb/IIIa antagonists

- AU Cheng, S.; Craig, W. S.; Mullen, D.; Tschopp, J. F.; Dixon, D.; Pierschbacher, M. D.
- CS Telios Pharmaceuticals, Inc., San Diego, CA, 92121, USA
- SO Pept.: Chem., Struct. Biol., Proc. Am. Pept. Symp., 13th (1994), Meeting Date 1993, 384-6. Editor(s): Hodges, Robert S.; Smith, John A. Publisher: ESCOM, Leiden, Neth. CODEN: 60LXAW
- DT Conference
- LA English
- AB Several cyclic RGD peptides modeled around TP9021 were designed and their selectivity for GPIIb/IIIa antagonist activity was examined Structure activity relations are discussed.
- IT 161790-77-8 161790-78-9

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(design and synthesis of novel cyclic RGD peptides as highly potent and selective GPIIb/IIIa antagonists and antiplatelet activity)

- L38 ANSWER 23 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
- AN 1994:450221 HCAPLUS
- DN 121:50221
- TI Selective affinity labeling of rat brain μ and δ opioid receptors by thiol-containing enkephalins
- AU Yasunaga, Teruo; Nagaishi, Masaya; Shimohigashi, Yasuyuki; Kodama, Hiroaki; Kondo, Michio; Ohno, Motonori
- CS Fac. Sci. Eng., Saga Univ., Saga, 840, Japan
- SO Peptide Chemistry (1993), 31st, 333-6 CODEN: PECHDP; ISSN: 0388-3698
- DT Journal
- LA English
- AB [D-Ala2,Leu(CH2S-Npys)5]enkephalin (I) and [D-Ala2,Leu5]enkephalyl-Cys(Npys)6 (II) bound to the ligand-binding sites of opioid receptors in rat brain membrane prepns. (Npys = 3-nitro-2-pyridinesulfenyl). If there was a free mercapto group near the peptide bound to the receptor, the Npys group would react with it to form a disulfide bound. Thus after preincubation with Npys-peptides the ordinary receptor binding assay using DAGO and DSLET for μ and δ opioid receptors, resp., was used to estimate the unlabeled receptors and consequently the amount of labeled receptors. It was found: (1) that I labels μ receptors more specifically than δ receptors, (2) that II labels δ receptors more specifically than μ receptors, and (3) that the opioid receptor proteins contain a free mercapto group in the ligand binding site and that Npys-containing enkephalin analogs can label them effectively.
- IT 120866-05-9

RL: ANST (Analytical study)
(opioid receptor labeling with, in brain, mercapto group at ligand binding site in relation to)

- L38 ANSWER 24 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
- AN 1994:153908 HCAPLUS
- DN 120:153908
- TI Stereospecific affinity labeling of δ-opioid receptors by enkephalin analogs containing S-activated cysteine residue at position 6
- AU Yasunaga, Teruo; Kodaman, Hiroaki; Higo, Atsushi; Nagaishi, Masaya; Shimohigashi, Yasuyuki; Ohno, Motonori; Kondo, Michio
- CS Fac. Sci. Eng., Saga Univ., Saga, 840, Japan
- SO Pept. Chem. 1992, Proc. Jpn. Symp., 2nd (1993), Meeting Date 1992, 375-7. Editor(s): Yanaihara, Noboru. Publisher: ESCOM, Leiden,

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Neth.
     CODEN: 59NTAC
DТ
     Conference
LA
     English
     A series of 4 stereoisomeric [D-Ala5, Leu5] enkephalyl-Cys(Npys)6 (Npys is
AB
     3-nitro-2-pyridinesulfenyl) analogs was synthesized with the
     configurational combinations of L-L, L-D, D-L, and D-D at positions 5 and
         These synthetic peptides were tested for their ability to displace the
     δ-opioid receptor ligand [D-Ser2,Leu5,Thr6]enkephalin and the
     μ-opioid receptor ligand [D-Ala2, MePhe4, Glyol5] enkephalin in rat brain
     membrane prepns. The enkephalin analogs containing L-Leu5 exhibited a higher
     affinity for the \delta receptors than did the D-Leu5-containing analogs.
     The L-L and L-D analogs were 2-3-fold more selective for \delta receptors
     than for \mu receptors, whereas the D-L and D-D analogs were \mu
     receptor-selective.
TΤ
     120866-05-9P 153369-18-7P 153369-19-8P
     153369-20-1P
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (preparation and opioid receptor subtypes affinity labeling by)
L38 ANSWER 25 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
     1993:102428 HCAPLUS
AN
DN
     118:102428
     Compatibility of the S-(3-nitro-2-pyridinesulfenyl) protecting group with
TI
     DCC/HOBt coupling chemistry
ΑU
    Matsueda, Rei; Higashida, Susumu; Albericio, Fernando; Andreu, David
CS
     Sankyo Co., Tokyo, Japan
     Peptide Research (1992), 5(5), 262-4
SO
     CODEN: PEREEO; ISSN: 1040-5704
     Journal
DT
LA
    English
     Two recent reports (Albericio, F.; et. al., 1989 and Ploux, O.; et. al.,
AΒ
     1987) on the partial lability of the 3-nitro-2-pyridinesulfenyl (Npys)
     thiol protecting group towards 1-hydroxy-benzotriazole (HOBt) have
     prompted a rechecking of the chemical behavior of this group. Using both
     soluble and polymer-bound forms of Cys(Npys) as test materials, the complete
     stability of this protection against HOBt has now been definitively
     established, and its compatibility with tert-butoxycarbonyl
     (Boc) -benzyl-based solid-phase synthesis strategies has been clearly
     confirmed by stability assays against a wide range of reagents, as well as
    by the successful synthesis of several Cys(Npys)-containing peptides.
    143642-69-7P 145904-00-3P
IT
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (preparation of, by solid-phase tert-butoxycarbonyl-benzyl method,
        nitropyridinesulfenyl protective group stability in)
L38 ANSWER 26 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
AN
     1992:592349 HCAPLUS
DN
     117:192349
     Conformationally constrained peptides I
TI
     Bhatnagar, Pradip Kumar; Jarlais, Renee Louise Des; Dixon, James Scott;
     Hendrickson, Wayne Arthur; Kopple, Kenneth D.; Kwong, Peter; Peishoff,
     Catherine Elizabeth; Ryu, Seong Eon; Truneh, Alemseged; Sweet, Raymond W.
PΑ
     Smithkline Beecham Corp., USA; Columbia University
     PCT Int. Appl., 38 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LA
    English
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APPLICATION NO. DATE

KIND DATE

FAN.CNT 1

PATENT NO.

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ΡI
    WO 9209625
                   A1 19920611
                                        WO 1991-US8873 19911127 <--
        W: AU, CA, JP, US
        RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE
                                        AU 1991-91188 19911127 <--
                    A1 19920625
PRAI US 1990-619782
                          19901129 <--
    WO 1991-US8873
                          19911127 <--
os
    MARPAT 117:192349
GΙ
    For diagram(s), see printed CA Issue.
AB
    Peptides X-A-B-C-D-Y (A-B-C-D = \beta-turn tetrapeptide, \beta-turn
    tetrapeptide mimic able to bind to a HIV envelope protein; X, Y = groups
    restricting the stereochem. structure of A-B-C-D to a \beta-turn or
     \beta-turn mimic) were prepared as HIV infection inhibitors (no data).
     Thus, peptides I and II (X1 = Gly, X2 = Thr; X1, X2 = bond) were prepared by
     solid-phase synthesis.
IT
    143412-02-6P
    RL: RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
        (solid-phase synthesis of, as HIV inhibitor)
    ANSWER 27 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
AN
    1992:551411 HCAPLUS
DN
    117:151411
    Synthesis of equimolar multiple oligomer mixtures, especially of
ΤI
    oligopeptide mixtures
    Houghten, Richard A.; Cuervo, Julio Hernan; Pinilla, Clemencia; Appel, Jon
TN
    R., Jr.; Blondelle, Silvie
PΑ
    Interex Pharmaceuticals Ltd. Partnership, USA
SO
    PCT Int. Appl., 197 pp.
    CODEN: PIXXD2
DT
    Patent
LA
    English
FAN.CNT 4
                    KIND DATE
                                        APPLICATION NO. DATE
    PATENT NO.
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                                        ______
    WO 9209300
PI
                          19920611
                                        WO 1991-US8694
                    A1
                                                         19911120 <--
        W: AU, CA, JP
        RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE
                          19920522 CA 1991-2090860 19911120 <--
    CA 2090860
                AA
    CA 2090860
                     C
                          20030916
                     A1
                          19920625
                                        AU 1991-91418
    AU 9191418
                                                         19911120 <--
                     B2
                          19960502
    AU 668347
    EP 558671
                     A1
                          19930908
                                        EP 1992-902209
                                                         19911120 <--
                          19990127
                     В1
    EP 558671
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE
    JP 06507378 T2
                                        JP 1992-502640
                                                         19911120 <--
                          19940825
                     B2
    JP 3523252
                          20040426
                     E
    AT 176239
                          19990215
                                        AT 1992-902209
                                                         19911120 <--
                    T3
                                        ES 1992-902209
                                                         19911120 <--
    ES 2129442
                          19990616
    US 5504190
                    Α
                          19960402
                                        US 1994-253854
                                                         19940603 <--
PRAI US 1990-617023 A
                          19901121 <---
    US 1991-701658 A
                          19910516 <--
                          19911119 <--
19911120 <--
    US 1991-797551
                    Α
    WO 1991-US8694
    A method is described for preparing mixts. of oligopeptides by the
AB
    solid-phase method. These mixts. were then tested by a monoclonal
    antibody binding assay to identify the most active sequences, as well as
    for bactericidal, fungicidal, and virucidal activity. Thus,
    Ac-Arg-Arg-Trp-Trp-Cys-Arg-NH2 had a monoclonal antibody-binding Ed50 of
     3.4 μg/mL and a min. inhibitory concentration against Staphylococcus aureus of
    3.2-6.5 \mu g/mL.
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IT 143459-89-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation and bactericidal activity of)

- L38 ANSWER 28 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
- AN 1992:551375 HCAPLUS
- DN 117:151375
- TI Design and synthesis of highly specific and selective enkephalin analog containing S-Npys-cysteine for δ opioid receptors
- AU Matsueda, Rei; Yasunaga, Teruo; Kodama, Hiroaki; Kondo, Michio; Costa, Tommaso; Shimohigashi, Yasuyuki
- CS New Lead Res. Lab., Sankyo Co., Ltd., Tokyo, 140, Japan
- SO Chemistry Letters (1992), (7), 1259-62 CODEN: CMLTAG; ISSN: 0366-7022
- DT Journal
- LA English
- AB Enkephalin analogs containing S-(3-nitro-2-pyridinesulfenyl) cysteine at positions 1, 5, or 6 were prepared for searching possible thiol groups in opioid receptors. In the radioligand receptor assay and biol. assays, analog H-D-Ala-Gly-Phe-Leu-Cys(Npys)-OH (Npys = 3-nitro-2-pyridinesulfenyl) exhibited a very high affinity and selectivity for δ over μ receptors, and its covalent attachment to δ receptors through disulfide bonding was evidenced.
- IT 120866-06-0P 143642-69-7P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation and opioid receptor selectivity of)

- L38 ANSWER 29 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
- AN 1992:427115 HCAPLUS
- DN 117:27115
- TI Stability of the S-NPYS protecting group against HOBT
- AU Matsueda, Rei; Higashida, Susumu; Albericio, Fernando; Andreu, David
- CS New Lead Res. Lab., Sankyo Co., Ltd., Tokyo, 140, Japan
- SO Peptide Chemistry (1992), Volume Date 1991, 29th, 111-14 CODEN: PECHDP; ISSN: 0388-3698
- DT Journal
- LA English
- AB A symposium report on the stability of the S-Npys (Npys = 3-nitro-2-pyridinesulfenyl) protective group against 1-hydroxybenzotriazole (HOBt). The S-Npys group is absolutely stable against HOBt. Cathepsin B inhibitor Ac-Phe-Arg-Arg-Cys(Npys)-Phe-OH, opiate δ-receptor sp. labeling ligand H-Tyr-D-Ala-Gly-Phe-Leu-Cys(Npys)-OH, and thrombin- and plasmin-induced platelet aggregation selective inhibitor H-Phe-Gln-Val-Val-Cys(Npys)-Gly-NH2 were prepared by the solid-phase via DCC/HOBt couplings.
- IT 120866-05-9P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of, by solid-phase method via dicyclohexylcarbodiamide/hydroxyb enzotriazole couplings)

- L38 ANSWER 30 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
- AN 1990:151975 HCAPLUS
- DN 112:151975
- TI Interaction of S-activated enkephalin analogs with opiate receptors
- AU Kodama, Hiroaki; Shimohigashi, Yasuyuki; Ogasawara, Tomio; Koshizaka, Takuya; Kurono, Masayasu; Matsueda, Rei; Soejima, Kaori; Kondo, Michio; Yagi, Kunio
- CS Fac. Sci. Eng., Saga Univ., Honjo, 840, Japan

- SO Biochemistry International (1989), 19(6), 1159-64 CODEN: BIINDF; ISSN: 0158-5231
- DT Journal
- LA English
- AB Enkephalin analogs containing a thiol activated by a thiomethyl (SCH3) or 3-nitro-2-pyridinesulfenyl (Npys) group were synthesized. Incubation of such S-activated enkephalin analogs as [D-Ala2,Leu(CH2S)SCH35]enkephalin or [D-Ala2,Leu(CH2S)Npys5]-enkephalin with guinea pig ileum (GPI) resulted in the continuous stimulation of the μ opiate receptors. This sustained GPI-activity was completely reversed with the antagonist naloxone, and subsequent washings elicited again the full enkephalin activity. When GPI showing full enkephalin activity was incubated with 1 mM dithiothreitol, .apprx.70% of the activity was eliminated. Examination of enkephalin analogs containing Cys(NPys) at position 1, 5, or 6 suggested that only 1 thiol group exists near the binding site of the μ receptor in GPI. Similar results were also obtained for the μ receptors in mouse vas deferens.
- IT 120866-05-9 126071-09-8

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(biol. activity of, opioid receptor mediation of, structure in relation to)

- L38 ANSWER 31 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
- AN 1989:400894 HCAPLUS
- DN 111:894
- TI Opiate-receptor interaction of enkephalin analogs containing activated mixed-disulfide
- AU Kodama, Hiroaki; Soejima, Kaori; Kondo, Michio; Matsueda, Rei; Shimohigashi, Yasuyuki; Ogasawara, Tomio; Koshizaka, Takuya; Kurono, Masayasu; Yagi, Kunio
- CS Fac. Sci. Eng., Saga Univ., Saga, 840, Japan
- SO Peptide Chemistry (1989), Volume Date 1988, 26th, 51-6 CODEN: PECHDP; ISSN: 0388-3698
- DT Journal
- LA English

GI

AB To determine the role of the thiol group in opiate receptor binding, 3-nitro-2-pyridinesulfenyl (NPYS) was used for thiol activation of enkephalins, and the biol. activity of these enkephalin analogs was investigated using the guinea pig ileum smooth muscle (GPI) and mouse was deferens (MVD) assay. [D-Ala2,Leu(CH2S)NPYS5]-enkephalin (I) had a similar activity as [D-Ala2,Leu(CH2S)SCH35] enkephalin (Enk-SSCH3) in the MVD assay, whereas it was less potent (6-fold) in the PGI assay. The wash-out of these peptides from the receptor prepns. was very difficult at higher doses (100 nM) compared with standard enkephalins. The sustained GPI-activity of I (1 μ M) was completely reversed with the μ -selective antagonist naloxone (10 μ M). However, the washings

after naloxone treatment elicited full I activity. In contrast, inhibition of ENK-SNPYS activity with dithiothreitol (DTT) (1 mM) was not reversed by washing. Thus, I was covalently linked to μ -receptors through a In the MVD which disulfide linkage which was cleaved reductively by DTT. contains predominantly δ -receptors in addition to μ - and κ-receptors, I showed 51% activity following washings, was completely inhibited by naloxone, and 35% reactivation occurred following subsequent washings. DTT treatment completely eliminated I activity. Using the δ -selective DADLE and the μ -selective DAGO on I-treated MVD it was shown that although MVD contains both $\delta\text{-}$ and μ -receptors, only μ -receptors cross-link with I. To determine other possible thiol groups in the receptor, enkephalin analogs were synthesized by replacing amino acids at position 1, 5, or 6 by Cys(NPYS). The biol. activities of these analogs on GPI indicated no other thiol groups in the enkephalin binding sites. However, in MVD [L-Ala2,Cys(NPYS)2]Enk and [D-Ala2, Leu5] Enk-Lys (NPYS) 6 were fairly active.

IT 120866-05-9 120866-06-0

RL: PROC (Process)

(opioid receptor binding of, disulfide linkage in)

- L38 ANSWER 32 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
- AN 1986:456803 HCAPLUS
- DN 105:56803
- TI Renin inhibition by linear and conformationally restricted analogs of renin substrate
- AU Nakaie, Clovis R.; Pesquero, Jorge L.; Oliveira, Maria C. F.; Juliano, Luiz; Paiva, Antonio C. M.
- CS Dep. Biophys., Esc. Paulista Med., Sao Paulo, 04034, Brazil
- SO Pept.: Struct. Funct., Proc. Am. Pept. Symp., 9th (1985), 755-8 CODEN: 54ZNAJ
- DT Conference
- LA English
- As series of linear and cyclic analogs of the equine angiotensinogen (I)-6-11) sequence (His-Pro-Phe-His-Leu-Leu) were synthesized and assayed as potential renin (II) inhibitors. The pK values of the titratable groups were also determined in order to obtain some information about the conformational state of these mols. The inhibitory peptides containing the His-Pro-Phe-His sequence bound to subsites S2-S5 in the II active center as long as the residues corresponding to I positions 10 and 11 were present to favor binding of inhibitor to enzyme. The stabilization of the β-turn conformation of the His-Pro-Phe-His segment by an SS bridge between the 2 cysteines in Cys-His-Pro-Phe-His-Cys-NH2 to form a cyclic peptide proved to be the best inhibitor in the series. The results gave further support to the idea that a β-turn-like structure involving the His-Pro-Phe-His region of I, and of competitive inhibitors containing this sequence, may be regarded as a possible binding conformation.
- IT 98122-92-0

RL: BIOL (Biological study)

(renin inhibition by, conformation in relation to)

IT 98122-91-9

RL: BIOL (Biological study)

(renin response to, conformation in relation to)

- L38 ANSWER 33 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
- AN 1985:518663 HCAPLUS
- DN 103:118663
- TI Importance of substrate conformation for renin activity
- AU Oliveira, Maria C. F.; Nakaie, Clovis R.; Pesquero, Jorge L.; Paiva, Antonio C. M.
- CS Dep. Biophys., Esc. Paul. Med., Sao Paolo, 04034, Brazil

Prog. Bioorg. Chem. Mol. Biol., Proc. Int. Symp. Front. Bioorg. Chem. Mol. Biol. (1984), 127-32. Editor(s): Ovchinnikov, Yu. A. Publisher: Elsevier, Amsterdam, Neth. CODEN: 53SHAR

DT Conference

LA English

AB Conformationally restricted analogs of angiotensinogen fragments were prepared and studied as possible inhibitors of human renin. The cyclic peptides, Cys-His-Pro-Phe-His-Cys and Cys-His-Pro-Phe-His-Cys-NH2 (containing cystine disulfide bonds), had Ki values for renin of 33 and 7.5 μM , resp., demonstrating that a free C-terminal carboxyl group interfered with the interaction of the peptides with the enzyme active site. Linear analogs of the angiotensinogen-(6-11) sequence and the corresponding cyclic analogs (obtained by amide bond formation between the C-terminal carboxyl and N-terminal amino groups) were also tested as renin inhibitors. The inhibitory peptides containing the His6-Pro7-Phe8-His9 sequence bound to the S2-S5 subsites of the renin active site, with this binding being favored by the β -turn conformation of the Pro10-Phe11 segment.

IT 98122-91-9P 98122-92-0P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation and human renin inhibition by, structure-activity relations in)

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L38 ANSWER 34 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
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AN 1984:631013 HCAPLUS

DN 101:231013

TI Phosphinyl- and phosphinothioylamino acids and peptides. VIII. New practical removal conditions for the S-Mpt group and their application for the synthesis of bis[N,N-diallyl-[D-Ala2, L-Leu5]-enkephalyl]cystine

AU Ueki, Masaaki; Shinozaki, Kozo

CS Dep. Appl. Chem., Sci. Univ. Tokyo, Tokyo, 162, Japan

SO Bulletin of the Chemical Society of Japan (1984), 57(8), 2156-61 CODEN: BCSJA8; ISSN: 0009-2673

DT Journal

LA English

GΙ

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(ally1)<sub>2</sub>-Tyr-D-Ala-Gly-Phe-Leu-Cys-OH
(ally1)<sub>2</sub>-Tyr-D-Ala-Gly-Phe-Leu-Cys-OH

H-Tyr-D-Ala-Gly-Phe-Leu-Cys-OH

H-Tyr-D-Ala-Gly-Phe-Leu-Cys-OH
```

Title enkephalin analog I was prepared by conventional solution methods using the dimethylphosphinothioyl (Mpt) group for the protection of the SH group of cysteine. Mp was removed without damaging the allyl group by mild removal conditions using KF/18-crown-6 in MeCN/MeOH. Thus, Z-Tyr(CMe3)-D-ala-Gly-OEt (Z = PhCH2O2C) was Z-deblocked, treated with allyl bromide, and then saponified to give (allyl)2-Tyr(CMe3)-D-Ala-Gly-OH (II), whereas H-Phe-Leu-Cys(Mpt)-OCH2C6H4OMe-p.HCl (III) was prepared by stepwise couplings. II was coupled with III by DCC/1-hydroxybenzotriazole to give (allyl)2-Tyr(CMe3)-D-Ala-Gly-Phe-Leu-Cys(Mpt)-OCH2C6H4OMe-p (IV), which was deblocked by CF3CO2H to give (allyl)2-Tyr-D-Ala-Gly-Phe-Leu-Cys(Mpt)-OH (V). IV and V were both converted to I. Enkephalin analog VI was also prepared

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TT
     93450-66-9P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (preparation and deblocking and disulfide coupling reaction of)
IT
     93450-69-2P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (preparation and deblocking of)
TT
     93450-70-5P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (preparation and deblocking-disulfide coupling reaction of)
IT
     93450-67-0P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (preparation and disulfide coupling reaction of)
     ANSWER 35 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
L38
     1984:525749 HCAPLUS
AN
     101:125749
DN
TТ
     Conformational aspects of angiotensinogen analogs with renin inhibitory
     activity
     Liepina, I.; Nikiforovich, G. V.; Paiva, Antonio C. M.
ΔIJ
CS
     Inst. Org. Synth., Riga, 226006, USSR
SO
     Biochemical and Biophysical Research Communications (1984),
     122(2), 700-5
     CODEN: BBRCA9; ISSN: 0006-291X
DT
     Journal
LΑ
     English
     Linear and cyclic peptides containing the His6-Pro7-Phe8-His9 sequence of
AΒ
     renin's substrate (angiotensinogen) were shown to be effective competitive
     inhibitors of the enzyme. Calcns. and comparison of low-energy structures
     for these peptides give support to the existence of a \beta-turn-like
     structure involving the His-Pro-Phe-His region of the renin substrate and
     of the competitive inhibitors containing that sequence. This structure may be
     regarded as a possible inhibition conformation, occurring in the process
     of binding to renin.
IT
     91990-58-8
     RL: BIOL (Biological study)
        (renin inhibition by, conformation in relation to)
     ANSWER 36 OF 36 HCAPLUS COPYRIGHT 2004 ACS on STN
L38
AN
     1982:35704 HCAPLUS
DN
     96:35704
     Protection of side chain functional groups of amino acids by
TI
     phosphinothioyl groups
ΑU
     Ueki, Masaaki; Shinozaki, Kozo; Inazu, Toshiyuki
     Dep. Appl. Chem., Sci. Univ. Tokyo, Tokyo, 162, Japan
CS
     Peptide Chemistry (1980), 18th, 37-40
SO
     CODEN: PECHDP; ISSN: 0388-3698
DT
     Journal
LΑ
     English
     The use of title groups, e.g., Me2P(S) (Mpt) and pH2P(S) (Ppt), for the
     protection of OH and SH groups in peptide synthesis was studied. The
     N-Mpt group can be cleaved by acid, whereas the O-Mpt group is stable
     under acidic conditions but can be removed by alkaline hydrolysis or ester
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presence of Et3N to give H-Cys(Ppt)-OH or Ppt-Cys(Ppt)-OH, depending on the ratios of reagents. Cysteine underwent a Schotten-Baumann type reaction with Mpt-Cl to give Mpt-Cys(Mpt)-OH, which was selectively

exchange reaction. Cysteine was treated with Ppt-Cl in aqueous dioxane in the

cleaved by HCl to give H-Cys(Mpt)-OH. Boc-Ala-Cys(R)-OMe [Boc = Me3CO2C, R = Ppt, Mpt, Et2P(S), Et2P(O)] were stable under neutral conditions, but they underwent decomposition in the presence of Et3N to give Boc-Ala- Δ Ala-OMe. Boc-Tyr-D-Ala-Gly-Phe-Leu-Cys(Mpt)-OMe was prepared and then treated with base to give Boc-Tyr-D-Ala-Gly-Phe-Leu- Δ Ala-OMe, which was deblocked to give H-Tyr-D-Ala-Gly-Phe-Leu- Δ Ala-OH.

IT 79259-38-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and decomposition of)

IT 79259-35-1P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation and partial deblocking of)

IT 79259-37-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and peptide coupling of, with tyrosine derivative)

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FILE COVERS 1907 - 21 Jun 2004 VOL 140 ISS 26 FILE LAST UPDATED: 20 Jun 2004 (20040620/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

'OBI' IS DEFAULT SEARCH FIELD FOR 'HCAPLUS' FILE

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L36
    ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2004 ACS on STN
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AN2002:637480 HCAPLUS

DN137:190724

ΤI Melanocortin metallopeptides for treatment of sexual dysfunction

Sharma, Shubh D.; Shi, Yi-qun; Yang, Wei; Cai, Hui-zhi; Shadiack, Annette

PΑ Palatin Technologies, Inc., USA SO

PCT Int. Appl., 58 pp. CODEN: PIXXD2

DTPatent

LA English

FAN.CNT 1

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APPLICATION NO. DATE
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os
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MARPAT 137:190724

AB Metallopeptides are provided for use in treatment of sexual dysfunction in mammals. The metallopeptides are agonists for at least one of melanocortin-3 or melanocortin-4 receptors. The metallopeptides are conformationally fixed on complexation of a metal ion-binding portion

thereof with a metal ion. Also provided are metallopeptides that are antagonists for at least one of melanocortin-3 or melanocortin-4 receptors.

IT 448903-52-4 448903-54-6 448904-08-3

> RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(melanocortin metallopeptides for treatment of sexual dysfunction)

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ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2004 ACS on STN
L36
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AN2001:137478 HCAPLUS

DN 134:188233

Melanocortin metallopeptide constructs, combinatorial libraries, and TI applications

TN Sharma, Shubh D.; Shi, Yi-Qun; Yang, Wei; Cai, Hui-Zhi

Palatin Technologies, Inc., USA PA

SO PCT Int. Appl., 80 pp.

CODEN: PIXXD2

Patent DT

English LA

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PATENT NO.
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                                         APPLICATION NO. DATE
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                    A1 20010222
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            IE, SI, LT, LV, FI, RO, MK, CY, AL
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PRAI US 1999-148994P Р 19990812 WO 2000-US16396 W 20000615

OS MARPAT 134:188233

Metallopeptides and metallopeptide combinatorial libraries specific for AΒ melanocortin receptors are provided, for use in biol., pharmaceutical and related applications. The metallopeptides and combinatorial libraries are made of peptides, peptidomimetics and peptide-like constructs, in which the peptide, peptidomimetic or construct is conformationally fixed on complexation of a metal ion-binding portion thereof with a metal ion.

IT 327606-44-0P

> RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(melanocortin metallopeptide constructs, combinatorial libraries, and applications)

RE.CNT THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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